



Australian Government
Department of Education, Employment
and Workplace Relations



ICP05 Printing and Graphic Arts Training Package

Volume 4 of 6

Version Number: 2
Review Date: 31 August 2008



ICP05 Printing and Graphic Arts Training Package

Converting, Binding and Finishing Units of Competency

This document contains part of the endorsed components of the Training Package. It should not be used in isolation but must be used in the context of the whole endorsed Training Package.

Volume 4 of 6 Printing and Graphic Arts Training Package (Volume 4 - Converting, Binding and Finishing Units of Competency)

1 of 6 Introduction, Assessment Guidelines and Qualifications

2 of 6 Support and Pre-press Units of Competency

3 of 6 Multimedia and Printing Units of Competency

5 of 6 Screen Printing, Ink Manufacture and Holistic Knowledge Units of Competency

6 of 6 Imported Units of Competency

To be reviewed by 31 August 2008

Endorsed 22 July 2005

ICP05 - Printing and Graphic Arts Training Package

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Version Modification History

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

Version	Release Date	Comments
2	To be provided	<p>The following has been changed in 274 units:</p> <ul style="list-style-type: none">• Employability skills (ES) mandatory statement inserted; Key Competencies information removed. Code changed to reflect mandatory ES changes.• Unit reformatted into latest template requirements; Skills and Knowledge improved. <p>Category 1 changes made throughout the Training Package to correct typographical, grammatical and minor formatting errors.</p>
1	30/09/2005	<p>Primary release. ICP05 Printing and Graphic Arts Training Package replaces ICP99 Printing and Graphic Arts Training Package.</p>

Qualifications Framework

The Australian Qualifications Framework

What is the Australian Qualifications Framework?

A brief overview of the Australian Qualifications Framework (AQF) follows. For a full explanation of the AQF, see the *AQF Implementation Handbook*. The 2007 version of the *AQF Implementation Handbook* is expected to be available on the Australian Qualifications Framework Advisory Board (AQFAB) website www.aqf.edu.au during September 2007, and in print in October 2007 (obtain the hard copy by contacting AQFAB on phone 03 9639 1606 or email at aqfab@curriculum.edu.au).

The AQF provides a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training in Australia. In the vocational education and training (VET) sector it assists national consistency for all trainees, learners, employers and providers by enabling national recognition of qualifications and Statements of Attainment.

Training Package qualifications in the VET sector must comply with the titles and guidelines of the AQF. Endorsed Training Packages provide a unique title for each AQF qualification which must always be reproduced accurately.

Qualifications

Training Packages can incorporate the following eight AQF qualifications.

- Certificate I in ...
- Certificate II in ...
- Certificate III in ...
- Certificate IV in ...
- Diploma of ...
- Advanced Diploma of ...
- Vocational Graduate Certificate of ...
- Vocational Graduate Diploma of ...

On completion of the requirements defined in the Training Package, a Registered Training Organisation (RTO) may issue a nationally recognised AQF qualification. Issuance of AQF qualifications must comply with the advice provided in the *AQF Implementation Handbook* and the AQTF 2007 *Essential Standards for Registration*.

Statement of Attainment

A Statement of Attainment is issued by a Registered Training Organisation when an individual has completed one or more units of competency from nationally recognised qualification(s)/courses(s). Issuance of Statements of Attainment must comply with the advice provided in the current *AQF Implementation Handbook* and the AQTF 2007 *Essential Standards for Registration*.

Under the AQTF 2007, RTOs must recognise the achievement of competencies as recorded on a qualification or Statement of Attainment issued by other RTOs. Given this, recognised competencies can progressively build towards a full AQF qualification.

AQF Guidelines and Learning Outcomes

The *AQF Implementation Handbook* provides a comprehensive guideline for each AQF qualification. A summary of the learning outcome characteristics and their distinguishing features for each VET related AQF qualification is provided below.

Certificate I

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and skills would prepare a person to perform a defined range of activities most of which may be routine and predictable.

Applications may include a variety of employment related skills including preparatory access and participation skills, broad-based induction skills and/or specific workplace skills. They may also include participation in a team or work group.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate knowledge by recall in a narrow range of areas;
- demonstrate basic practical skills, such as the use of relevant tools;
- perform a sequence of routine tasks given clear direction
- receive and pass on messages/information.

Certificate II

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and skills would prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of operations to be applied.

Performance of a prescribed range of functions involving known routines and procedures and some accountability for the quality of outcomes.

Applications may include some complex or non-routine activities involving individual responsibility or autonomy and/or collaboration with others as part of a group or team.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate basic operational knowledge in a moderate range of areas;
- apply a defined range of skills;
- apply known solutions to a limited range of predictable problems;
- perform a range of tasks where choice between a limited range of options is required;
- assess and record information from varied sources;
- take limited responsibility for own outputs in work and learning.

Certificate III

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover selecting, adapting and transferring skills and knowledge to new environments and providing technical advice and some leadership in resolution of specified problems. This would be applied across a range of roles in a variety of contexts with some complexity in the extent and choice of options available.

Performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the selection of equipment, services or contingency measures and within known time constraints.

Applications may involve some responsibility for others. Participation in teams including

group or team co-ordination may be involved.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate some relevant theoretical knowledge
- apply a range of well-developed skills
- apply known solutions to a variety of predictable problems
- perform processes that require a range of well-developed skills where some discretion and judgement is required
- interpret available information, using discretion and judgement
- take responsibility for own outputs in work and learning
- take limited responsibility for the output of others.

Certificate IV

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance are involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature.

Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills. Applications involve responsibility for, and limited organisation of, others.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating some theoretical concepts
- apply solutions to a defined range of unpredictable problems
- identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas
- identify, analyse and evaluate information from a variety of sources
- take responsibility for own outputs in relation to specified quality standards
- take limited responsibility for the quantity and quality of the output of others.

Diploma

Characteristics of Learning Outcomes

Breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and co-ordination.

The self directed application of knowledge and skills, with substantial depth in some areas where judgment is required in planning and selecting appropriate equipment, services and techniques for self and others.

Applications involve participation in development of strategic initiatives as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation

functions. Group or team co-ordination may be involved.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

Distinguishing Features of Learning Outcomes

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas
- analyse and plan approaches to technical problems or management requirements
- transfer and apply theoretical concepts and/or technical or creative skills to a range of situations
- evaluate information, using it to forecast for planning or research purposes
- take responsibility for own outputs in relation to broad quantity and quality parameters
- take some responsibility for the achievement of group outcomes.

Advanced Diploma

Characteristics of Learning Outcomes

Breadth, depth and complexity involving analysis, design, planning, execution and evaluation across a range of technical and/or management functions including development of new criteria or applications or knowledge or procedures.

The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in achieving the outcomes is involved.

Applications involve significant judgement in planning, design, technical or leadership/guidance functions related to products, services, operations or procedures.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

Distinguishing Features of Learning Outcomes

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of specialised knowledge with depth in some areas
- analyse, diagnose, design and execute judgements across a broad range of technical or management functions
- generate ideas through the analysis of information and concepts at an abstract level
- demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills
- demonstrate accountability for personal outputs within broad parameters
- demonstrate accountability for personal and group outcomes within broad parameters.

Vocational Graduate Certificate

Characteristics of competencies or learning outcomes

- The self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Substantial breadth and complexity involving the initiation, analysis, design, planning, execution and evaluation of technical and management functions in highly varied and

highly specialised contexts.

- Applications involve making significant, high-level, independent judgements in major broad or planning, design, operational, technical and management functions in highly varied and specialised contexts. They may include responsibility and broad-ranging accountability for the structure, management and output of the work or functions of others.
- The degree of emphasis on breadth, as opposed to depth, of knowledge and skills may vary between qualifications granted at this level.

Distinguishing features of learning outcomes

- Demonstrate the self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Initiate, analyse, design, plan, execute and evaluate major broad or technical and management functions in highly varied and highly specialised contexts.
- Generate and evaluate ideas through the analysis of information and concepts at an abstract level.
- Demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills in complex contexts.
- Demonstrate responsibility and broad-ranging accountability for the structure, management and output of the work or functions of others.

Vocational Graduate Diploma

Characteristics of competencies or learning outcomes

- The self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Substantial breadth, depth and complexity involving the initiation, analysis, design, planning, execution and evaluation of major functions, both broad and highly specialised, in highly varied and highly specialised contexts.
- Further specialisation within a systematic and coherent body of knowledge.
- Applications involve making high-level, fully independent, complex judgements in broad planning, design, operational, technical and management functions in highly varied and highly specialised contexts. They may include full responsibility and accountability for all aspects of work and functions of others, including planning, budgeting and strategy development.
- The degree of emphasis on breadth, as opposed to depth, of knowledge and skills may vary between qualifications granted at this level.

Distinguishing features of learning outcomes

- Demonstrate the self-directed development and achievement of broad and highly specialised areas of knowledge and skills, building on prior knowledge and skills.
- Initiate, analyse, design, plan, execute and evaluate major functions, both broad and within highly varied and highly specialised contexts.
- Generate and evaluate complex ideas through the analysis of information and concepts at an abstract level.
- Demonstrate an expert command of wide-ranging, highly specialised, technical, creative or conceptual skills in complex and highly specialised or varied contexts.
- Demonstrate full responsibility and accountability for personal outputs.
- Demonstrate full responsibility and accountability for all aspects of the work or functions of others, including planning, budgeting and strategy.

Qualification Pathways

The following pathways charts are provided to show the types of pathways into and from qualifications that are possible with this Training Package. For more information about qualifications and pathways contact Innovation and Business Industry Skills Council (<http://www.ibsa.org.au>).

Skill Sets

Definition

Skill sets are defined as single units of competency, or combinations of units of competency from an endorsed Training Package, which link to a licence or regulatory requirement, or defined industry need.

Wording on Statements of Attainment

Skill sets are a way of publicly identifying logical groupings of units of competency which meet an identified need or industry outcome. Skill sets are not qualifications.

Where skill sets are identified in a Training Package, the Statement of Attainment can set out the competencies a person has achieved in a way that is consistent and clear for employers and others. This is done by including the wording "these competencies meet [insert skill set title or identified industry area] need" on the Statement of Attainment. This wording applies only to skill sets that are formally identified as such in the endorsed Training Package. See the 2007 edition of the AQF Implementation Handbook for advice on wording on Statements of Attainment the updated version is expected to be available on the AQFAB website www.aqf.edu.au during September 2007 and in print in October 2007.

Skill Sets in this Training Package

Where this section is blank, nationally recognised skill sets have yet to be identified in this industry.

Assessment Guidelines

Introduction

These Assessment Guidelines provide the endorsed framework for assessment of units of competency in this Training Package. They are designed to ensure that assessment is consistent with the AQTF 2007. Assessments against the units of competency in this Training Package must be carried out in accordance with these Assessment Guidelines.

Assessment System Overview

This section provides an overview of the requirements for assessment when using this Training Package, including a summary of the AQTF 2007 requirements; licensing/registration requirements; and assessment pathways.

Benchmarks for Assessment

Assessment within the National Skills Framework is the process of collecting evidence and making judgments about whether competency has been achieved to confirm whether an individual can perform to the standards expected in the workplace, as expressed in the relevant endorsed unit of competency.

In the areas of work covered by this Training Package, the endorsed units of competency are the benchmarks for assessment. As such, they provide the basis for nationally recognised Australian Qualifications Framework (AQF) qualifications and Statements of Attainment issued by Registered Training Organisations (RTOs).

Australian Quality Training Framework Assessment Requirements

Assessment leading to nationally recognised AQF qualifications and Statements of Attainment in the vocational education and training sector must meet the requirements of the AQTF as expressed in the AQTF 2007 *Essential Standards for Registration*.

The AQTF 2007 *Essential Standards for Registration* can be downloaded from <www.training.com.au/aqtf2007>. The following points summarise assessment requirements.

Registration of Training Organisations

Assessment must be conducted by, or on behalf of, an RTO formally registered by a State or Territory Registering/Course Accrediting Body in accordance with the AQTF 2007 *Essential Standards for Registration*. The RTO must have the specific units of competency and/or AQF qualifications on its scope of registration.

Quality Training and Assessment

Each RTO must provide quality training and assessment across all its operations. See the AQTF 2007 *Essential Standards for Registration*, Standard 1.

Assessor Competency Requirements

Each person involved in training, assessment or client service must be competent for the functions they perform. See the AQTF 2007 *Essential Standards for Registration*, Standard 1, for assessor (and trainer) competency requirements.

Assessment Requirements

The RTOs assessments, including RPL, must meet the requirements of the relevant endorsed Training Package. See the AQTF 2007 *Essential Standards for Registration*, Standard 1.

Assessment Strategies

Each RTO must have strategies for training and assessment that meet the requirements of the relevant Training Package or accredited course and are developed in consultation with industry stakeholders. See the AQTF 2007 *Essential Standards for Registration*, Standard 1.

National Recognition

Each RTO must recognise the AQF qualifications and Statements of Attainment issued by any other RTO. See the AQTF 2007 *Essential Standards for Registration*, Condition of Registration 7: Recognition of qualifications issued by other RTOs.

Access and Equity and Client Outcomes

Each RTO must adhere to the principles of access and equity and maximise outcomes for its clients. See the AQTF 2007 *Essential Standards for Registration*, Standard 2.

Monitoring Assessments

Training and/or assessment provided on behalf of the RTO must be monitored to ensure that it is in accordance with all aspects of the Essential Standards for Registration. See the AQTF 2007 *Essential Standards for Registration*, Standard 3.

Recording Assessment Outcomes

Each RTO must manage records to ensure their accuracy and integrity. See the AQTF 2007 *Essential Standards for Registration*, Standard 3.

Issuing AQF Qualifications and Statements of Attainment

Each RTO must issue AQF qualifications and Statements of Attainment that meet the requirements of the current AQF Implementation Handbook and the endorsed Training Packages within the scope of its registration. An AQF qualification is issued once the full requirements for a qualification, as specified in the nationally endorsed Training Package are met. A Statement of Attainment is issued when an individual has completed one or more units of competency from nationally recognised qualification(s)/courses(s). See the AQTF 2007 and the 2007 edition of the AQF Implementation Handbook-available on the AQFAB website <www.aqf.edu.au>.

Licensing/Registration Requirements

The developers of this Training Package, and DEST, consider that no licensing or registration requirements apply to RTOs, assessors or candidates with respect to this Training Package. Contact the relevant State or Territory Department(s) to check if there are any licensing or registration requirements with which you must comply. For further information on this topic contact:

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Hawthorn Victoria 3122

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Web: <http://www.ibsa.org.au>

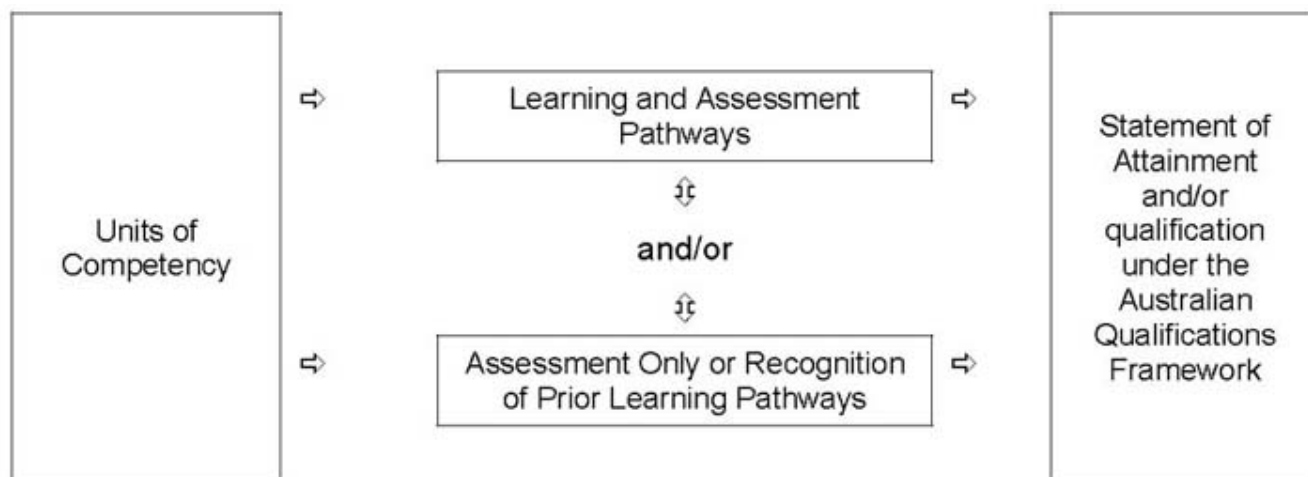
Email: virtual@ibsa.org.au

Pathways

The competencies in this Training Package may be attained in a number of ways including through:

- formal or informal education and training
- experiences in the workplace
- general life experience, and/or
- any combination of the above.

Assessment under this Training Package leading to an AQF qualification or Statement of Attainment may follow a learning and assessment pathway, an assessment-only or recognition pathway, or a combination of the two as illustrated in the following diagram.



Each of these assessment pathways leads to full recognition of competencies held - the critical issue is that the candidate is competent, not how the competency was acquired.

Assessment, by any pathway, must comply with the assessment requirements set out in the Assessment Guidelines of the Training Package and the AQTF 2007.

Learning and Assessment Pathways

Usually, learning and assessment are integrated, with assessment evidence being collected and feedback provided to the candidate at anytime throughout the learning and assessment process.

Learning and assessment pathways may include structured programs in a variety of contexts using a range of strategies to meet different learner needs. Structured learning and assessment programs could be: group-based, work-based, project-based, self-paced, action learning-based; conducted by distance or e-learning; and/or involve practice and experience in the workplace.

Learning and assessment pathways to suit Australian Apprenticeships have a mix of formal structured training and structured workplace experience with formative assessment activities through which candidates can acquire and demonstrate skills and knowledge from the relevant units of competency.

Assessment-Only or Recognition of Prior Learning Pathway

Competencies already held by individuals can be formally assessed against the units of competency in this Training Package, and should be recognised regardless of how, when or where they were achieved.

In an assessment-only or Recognition of Prior Learning (RPL) pathway, the candidate provides current, quality evidence of their competency against the relevant unit of competency. This process may be directed by the candidate and verified by the assessor, such as in the compilation of portfolios; or directed by the assessor, such as through observation of workplace performance and skills application, and oral and/or written assessment. Where the outcomes of this process indicate that the candidate is competent,

structured training is not required. The RPL requirements of the AQTF 2007 must be met (Standard 1).

As with all assessment, the assessor must be confident that the evidence indicates that the candidate is currently competent against the endorsed unit of competency. This evidence may take a variety of forms and might include certification, references from past employers, testimonials from clients, and work samples. The onus is on candidates to provide sufficient evidence to satisfy assessors that they currently hold the relevant competencies. In judging evidence, the assessor must ensure that the evidence of prior learning is:

- authentic (the candidate's own work)
- valid (directly related to the current version of the relevant endorsed unit of competency)
- reliable (shows that the candidate consistently meets the endorsed unit of competency)
- current (reflects the candidate's current capacity to perform the aspect of the work covered by the endorsed unit of competency), and
- sufficient (covers the full range of elements in the relevant unit of competency and addresses the four dimensions of competency, namely task skills, task management skills, contingency management skills, and job/role environment skills).

The assessment only or recognition of prior learning pathway is likely to be most appropriate in the following scenarios:

- candidates enrolling in qualifications who want recognition for prior learning or current competencies
- existing workers
- individuals with overseas qualifications
- recent migrants with established work histories
- people returning to the workplace, and
- people with disabilities or injuries requiring a change in career.

Combination of Pathways

Where candidates for assessment have gained competencies through work and life experience and gaps in their competence are identified, or where they require training in new areas, a combination of pathways may be appropriate.

In such situations, the candidate may undertake an initial assessment to determine their current competency. Once current competency is identified, a structured learning and assessment program ensures that the candidate acquires the required additional competencies identified as gaps.

Assessor Requirements

This section identifies the mandatory competencies for assessors, and clarifies how others may contribute to the assessment process where one person alone does not hold all the required competencies.

Assessor Competencies

The AQTF 2007 specifies mandatory competency requirements for assessors. For information, Standard 1, Element 1.4 from the AQTF 2007 *Essential Standards for Registration* follows:

1.4		<i>Training and assessment is delivered by trainers and assessors who:</i>
	a)	<i>have the necessary training and assessment competencies as determined by the National Quality Council or its successors</i>
	b)	<i>have the relevant vocational competencies at least to the level being delivered or</i>

		<i>assessed</i>
	c)	<i>continue developing their vocational and training and assessment competencies to support continuous improvements in the delivery of the RTO"s services.</i>

Designing Assessment Tools

This section provides an overview on the use and development of assessment tools.

Use of Assessment Tools

Assessment tools provide a means of collecting the evidence that assessors use in making judgments about whether candidates have achieved competency.

There is no set format or process for the design, production or development of assessment tools. Assessors may use prepared assessment tools, such as those specifically developed to support this Training Package, or they may develop their own.

Using Prepared Assessment Tools

If using prepared assessment tools, assessors should ensure these are benchmarked, or mapped, against the current version of the relevant unit of competency. This can be done by checking that the materials are listed on the National Training Information Service < www.ntis.gov.au>. Materials on the list have been noted by the National Quality Council as meeting their quality criteria for Training Package support materials.

Developing Assessment Tools

When developing assessment tools, assessors must ensure that they:

- are benchmarked against the relevant unit or units of competency
- are reviewed as part of the continuous improvement of assessment strategies as required under Standard 1 of the AQTF 2007
- meet the assessment requirements expressed in Standard 1 of the AQTF 2007.

A key reference for assessors developing assessment tools is TAA04 Training and Assessment Training Package and the unit of competency TAAASS403A *Develop assessment tools*. There is no set format or process for the design, production or development of assessment materials.

Conducting Assessment

This section details the mandatory assessment requirements and provides information on equity in assessment including reasonable adjustment.

Assessment Requirements

Assessments must meet the criteria set out in the AQTF 2007 Essential Standards for Registration.

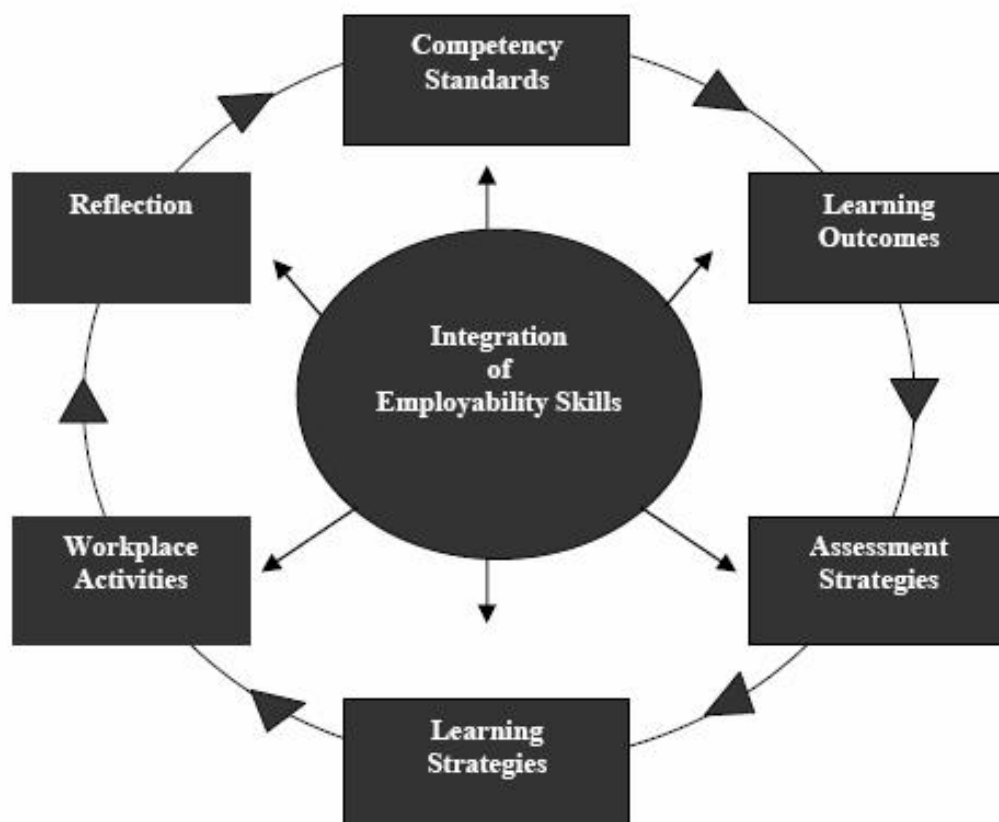
For information, the mandatory assessment requirements from Standard 1 from the AQTF 2007 *Essential Standards for Registration* are as follows:

1.5		<i>Assessment, including Recognition of Prior Learning:</i>
	a)	<i>meets the requirements of the relevant Training Package or accredited course,</i>

b)	<i>is conducted in accordance with the principles of assessment and the rules of evidence, and</i>
c)	<i>meets workplace and, where relevant, regulatory requirements.</i>

Assessment of Employability Skills

Employability Skills are integral to workplace competency. As such they must be considered in the design, customisation, delivery and assessment of vocational education and training programs in an integrated and holistic way, as represented diagrammatically below.



Employability Skills are embedded and explicit within each unit of competency. Training providers must use Employability Skills information in order to design valid and reliable training and assessment strategies. This analysis could include:

- reviewing units of competency to locate relevant Employability Skills and determine how they are applied within the unit
- analysing the Employability Skills Summary for the qualification in which the unit or units are packaged to help clarify relevant industry and workplace contexts and the application of Employability Skills at that qualification outcome
- designing training and assessment to address Employability Skills requirements.

For more information on Employability Skills in Innovation and Business Industry Skills Council Training Packages go to the Innovation and Business Industry Skills Council website at <http://www.ibsa.org.au>.

Access and Equity

An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment beyond the requirements

specified in this Training Package: training and assessment must be bias-free.

Under the rules for their development, Training Packages must reflect and cater for the increasing diversity of Australia's VET clients and Australia's current and future workforce. The flexibilities offered by Training Packages should enhance opportunities and potential outcomes for all people so that we can all benefit from a wider national skills base and a shared contribution to Australia's economic development and social and cultural life.

Reasonable adjustments

It is important that education providers take meaningful, transparent and reasonable steps to consult, consider and implement reasonable adjustments for students with disability.

Under the *Disability Standards for Education 2005*, education providers must make reasonable adjustments for people with disability to the maximum extent that those adjustments do not cause that provider unjustifiable hardship. While "reasonable adjustment" and "unjustifiable hardship" are different concepts and involve different considerations, they both seek to strike a balance between the interests of education providers and the interests of students with and without disability.

An adjustment is any measure or action that a student requires because of their disability, and which has the effect of assisting the student to access and participate in education and training on the same basis as students without a disability. An adjustment is reasonable if it achieves this purpose while taking into account factors such as the nature of the student's disability, the views of the student, the potential effect of the adjustment on the student and others who might be affected, and the costs and benefits of making the adjustment.

An education provider is also entitled to maintain the academic integrity of a course or program and to consider the requirements or components that are inherent or essential to its nature when assessing whether an adjustment is reasonable. There may be more than one adjustment that is reasonable in a given set of circumstances; education providers are required to make adjustments that are reasonable and that do not cause them unjustifiable hardship.

See Part 4, Chapter 2 of the *Training Package Development Handbook* (DEST, September 2007) for more information on reasonable adjustment, including examples of adjustments.

Further Sources of Information

The section provides a listing of useful contacts and resources to assist assessors in planning, designing, conducting and reviewing of assessments against this Training Package.

Contacts

Technical and Vocational Education and Training (TVET) Australia Limited

Level 21, 390 St Kilda Road, Melbourne VIC 3150

PO Box 12211, A"Beckett Street Post Office

MELBOURNE VICTORIA 8006

Ph: +61 3 9832 8100

Fax: +61 3 9832 8198

Email: sales@tvetaustralia.com.au

Web: www.tvetaustralia.com.au

For information on the TAA04 Training and Assessment Training Package contact:

Innovation & Business Skills Australia
Level 2, Building B, 192 Burwood Road
HAWTHORN VIC 3122
Telephone: (03) 9815 7000
Facsimile: (03) 9815 7001
Web: www.ibsa.org.au
Email: virtual@ibsa.org.au

General Resources

Refer to <http://antapubs.dest.gov.au/publications/search.asp> to locate the following ANTA publications.

AQF Implementation Handbook, third Edition. Australian Qualifications Framework Advisory Board, 2002, aqf.edu.au

Australian Quality Training Framework 2007 (AQTF 2007) - for information and resources go to < www.training.com.au/aqtf2007>

AQTF 2007 Essential Standards for Registration. Training organisations must meet these standards in order to deliver and assess nationally recognised training and issue nationally recognised qualifications. They include three standards, a requirement for registered training organisations to gather information on their performance against three quality indicators, and nine conditions of registration

AQTF 2007 User's Guide to the Essential Standards for Registration. A Users' Guide for training organisations who must meet these standards in order to deliver and assess nationally recognised training and issue nationally recognised qualifications.

AQTF 2007 Standards for Accredited Courses. State and Territory accrediting bodies are responsible for accrediting courses. This standard provides a national operating framework and template for the accreditation of courses.

TAA04 Training and Assessment Training Package. This is available from the Innovation and Innovation & Business Skills Australia (IBSA) Industry Skills Council and can be viewed, and components downloaded, from the National Training Information Service (NTIS).

National Training Information Service, an electronic database providing comprehensive information about RTOs, Training Packages and accredited courses - www.ntis.gov.au

Training Package Development Handbook (DEST, August 2007). Can be downloaded from www.dest.gov.au

Assessment Resources

Training Package Assessment Guides - a range of resources to assist RTOs in developing Training Package assessment materials (originally developed by ANTA with funding from the Department of Education, Training and Youth Affairs) and made up of 10 separate titles, as described at the publications page of www.dest.gov.au. Go to www.resourcegenerator.gov.au/loadpage.asp?TPAG.htm

Printed and/or CD ROM versions of the Guides can be purchased from Technical and Vocational Education and Training (TVET) Australia Limited. The resource includes the following guides:

- Training Package Assessment Materials Kit

- Assessing Competencies in Higher Qualifications
- Recognition Resource
- Kit to Support Assessor Training
- Candidates Kit: Guide to Assessment in New Apprenticeships
- Assessment Approaches for Small Workplaces
- Assessment Using Partnership Arrangements
- Strategies for ensuring Consistency in Assessment
- Networking for Assessors
- Quality Assurance Guide for Assessment

An additional guide "Delivery and Assessment Strategies" has been developed to complement these resources.

Assessment Tool Design and Conducting Assessment

VETASSESS & Western Australian Department of Training and Employment 2000, *Designing Tests - Guidelines for designing knowledge based tests for Training Packages*.

Vocational Education and Assessment Centre 1997, *Designing Workplace Assessment Tools, A self-directed learning program*, NSW TAFE.

Manufacturing Learning Australia 2000, *Assessment Solutions*, Australian Training Products, Melbourne.

Rumsey, David 1994, *Assessment practical guide*, Australian Government Publishing Service, Canberra.

Assessor Training

Australian Committee on Training Curriculum (ACTRAC) 1994, *Assessor training program - learning materials*, Australian Training Products, Melbourne.

Australian National Training Authority, *A Guide for Professional Development*, ANTA, Brisbane.

Australian Training Products Ltd *Assessment and Workplace Training, Training Package - Toolbox*, ATPL Melbourne (available from TVET).

Green, M, et al. 1997, *Key competencies professional development Package*, Department for Education and Children's Services, South Australia.

Victorian TAFE Association 2000, *The professional development CD: A learning tool*, VTA, Melbourne.

Assessment System Design and Management

Office of Training and Further Education 1998, *Demonstrating best practice in VET project - assessment systems and processes*, OTFE (now OTTE) Victoria.

Toop, L., Gibb, J. & Worsnop, P. *Assessment system designs*, Australian Government Publishing Service, Canberra.

ICPCF105B

Unit Descriptor

Operate in-line mail machine

This unit describes the performance outcomes, skills and knowledge required to safely operate an intelligent in-line cut sheet form feeder, folder and inserter mail machine.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to safely operate and monitor an in-line mail machine. The individual will be required to rectify any production faults but not machinery problems. The individual will off load the completed packages and correctly pack and label them for further distribution.

Unit Sector

Converting, Binding and Finishing

ELEMENT

PERFORMANCE CRITERIA

- | | |
|----------------------|---|
| 1. Monitor operation | <ul style="list-style-type: none"> 1.1 Job is signed off by printers and ready for mailing procedures 1.2 Machine is jogged to ensure correct positioning and hopper feed operation 1.3 All units are monitored to ensure optimum operation 1.4 Envelopes are manipulated and fanned to ensure they move efficiently through the machine 1.5 Folds, inserts and envelopes are continuously monitored for defects and defects are put aside for remake 1.6 Materials are checked and hoppers reloaded as required |
| 2. Check quality | <ul style="list-style-type: none"> 2.1 Mail is monitored to ensure quality standards are met 2.2 Supervisor is contacted when the quality standards are not met 2.3 Sequence is monitored according to job specifications 2.4 The number of spoils are documented according to enterprise procedures |
| 3. Pack envelopes | <ul style="list-style-type: none"> 3.1 Completed envelopes are unloaded and checked for quality 3.2 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications 3.3 Sequence numbers and postcodes are in correct pre-sort order ensuring job continuity 3.4 The job is reconciled and documented and the supervisor is notified if the job does not reconcile |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Basic computer skills
- OHS in relation to operating machinery
- Communication skills to read job specifications
- Teamwork when notifying the supervisor of problems
- Problem solving when reconciling the job
- Basic numeracy skills to reconcile mail
- Effective communication and teamwork with colleagues and supervisors

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Mailing procedures	• Job could be mailed or returned to client
Materials	• Printed multiple or single inserts and envelopes, water for gluing, glue
Mail type	• Full rate, National pre-sort, DPID
Units	• Hoppers, folders, inserters, folders, accumulator, sealers, exit conveyors
Machine	• Intelligent in-line cut sheet form feeder, folder and inserter

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Safely operate and monitor production on an in-line mail machine and correctly notify supervisor when problems arise
- Demonstrate all safety devices on the machine
- The individual will complete TWO entire jobs that include multiple inserts
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- An in-line cut sheet form feeder, folder and inserter

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU243B Reconcile process outputs

ICPCF202B**Unit Descriptor****Handline mail**

This unit describes the performance outcomes, skills and knowledge required to load and unload product on and off machines. It should be assessed separately only when this is a substantial part of the worker's job. Otherwise it is integrated into most printing and converting, binding and finishing set up units.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires knowledge and skills to collate and insert irregular and bulky mail. This will involve repetitive routine and non-routine activities.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------|--|
| 1. Collate materials | <ul style="list-style-type: none"> 1.1 All materials required for the job are checked and confirmed against <i>job specifications</i> 1.2 Materials are <i>changed</i> or adapted according to job specifications 1.3 Materials are arranged in a manner that makes manual collation as easy and safe as possible 1.4 Collated materials are correct and in sequence and any faulty materials are removed and documented 1.5 If required, items are decollated according to job specifications 1.6 Manual wrapping of materials is completed if required according to job specifications |
| 2. Match inserts | <ul style="list-style-type: none"> 2.1 Collated data is correctly <i>matched</i> to addressee 2.2 Address information is verified as accurate 2.3 Random checks are performed to ensure quality is met 2.4 Any discrepancies are reported to the supervisor 2.5 Envelopes or packs are glued or sealed according to job specifications |
| 3. Reconcile output | <ul style="list-style-type: none"> 3.1 The total number of throughputs matches the job specifications 3.2 The destination delivery unit rate matches the job specifications and meets Australia Post standards 3.3 An information <i>matching</i> trail is documented 3.4 Correct procedures for the <i>control of materials</i> are followed 3.5 Any discrepancies are reported to the supervisor |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Basic materials handling and use of technology skills
- OHS in relation to lifting and shifting stock
- Literacy skills to read job specifications and document an information matching trail
- Basic numeracy skills to reconcile mail
- Effective communication with colleagues and supervisors
- Teamwork with colleagues and supervisors to maintain the production process
- Identifying problems by using random checks to ensure quality is met and reporting discrepancies
- Planning and organising to ensure that materials are in the correct order and collated correctly

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Matched/ matching	<ul style="list-style-type: none"> • The process of keeping together a unique insert to the addressee that goes with at least one other unique insert in the same package, or a unique insert to the addressee that goes with the address information located on the outside of the package
Matched/ matching	<ul style="list-style-type: none"> • Labels added, censoring stickers to meet particular state and territory legislation, to meet client preferences
Materials	<ul style="list-style-type: none"> • Could include magazines, bulky or large paper inserts, samples in show bags, PR or promotional materials
Control of materials	<ul style="list-style-type: none"> • Includes spoils, depleted stock, oversupplies and undersupplies

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Manually collate and insert irregular and bulky mail or packages according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- The individual will change individual items, collate, pick and pack mail or packages and remove any spoils or faulty work
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF203B**Unit Descriptor****Employability Skills****Application of the Unit****Collate and insert mail manually**

This unit describes the performance outcomes, skills and knowledge required to manually collate and insert mail documents.

This unit contains employability skills.

This unit requires the individual to collate and insert mail. It involves known routines and procedures with some accountability for the quality of outcomes. It may involve some complex or non-routine activities involving individual responsibility or autonomy and / or collaboration with others as part of a group or team.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---------------------|--|
| 1. Collate inserts | <ul style="list-style-type: none"> 1.1 All inserts required for the job are checked and confirmed against job specifications 1.2 Inserts are arranged in a manner that makes manual collation as easy and safe as possible 1.3 Collated inserts are correct and in sequence |
| 2. Match inserts | <ul style="list-style-type: none"> 2.1 Collated data is correctly matched to addressee 2.2 Address information is verified as accurate 2.3 Bar code information is checked for correct sequence of addressees to collated information where relevant 2.4 Any discrepancies are reported to the supervisor |
| 3. Reconcile output | <ul style="list-style-type: none"> 3.1 The total number of throughputs matches the job specifications 3.2 The destination delivery unit rate matches the job specifications 3.3 An information matching trail is documented 3.4 Correct procedures for the control of materials are followed 3.5 Any discrepancies are reported to the supervisor |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Basic materials handling and use of technology skills
- OHS in relation to lifting and shifting stock
- Literacy skills to read job specifications and document an information matching trail
- Basic numeracy skills to reconcile mail
- Effective communication with colleagues and supervisors
- Teamwork with colleagues and supervisors to maintain the production process
- Identifying problems and faults and developing solutions
- Planning and organising to ensure that materials are in the correct order and collated correctly
- Reconciling mail and inserts at critical points in the process

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Matched / matching

- The process of keeping together a unique insert to the addressee that goes with at least one other unique insert in the same package, or a unique insert to the addressee that goes with the address information located on the outside of the package

Control of materials

- Includes spoils, depleted stock, oversupplies and undersupplies

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Manually collate and insert mail documents according to job specifications and within the production timeframe
- The individual will be able to manually collate and insert mail documents and reconcile the job. The individual will complete two full jobs

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended

ICPCF204B

Unit Descriptor

Employability Skills

Application of the Unit

Operate addressing machine

This unit describes the performance outcomes, skills and knowledge required to operate an addressing machine.

This unit contains employability skills.

This unit requires the individual to interpret the job specifications and operate the addressing machine. The individual will monitor production for problems and to ensure quality. The operator will correctly pack mail at the end of the process and clear the machine of materials and wastage.

Unit Sector

Converting, Binding and Finishing

ELEMENT

PERFORMANCE CRITERIA

- | | |
|----------------------------------|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Job is signed off by printers and ready for mailing procedures 1.3 The materials are checked and in correct order for the job and all sheets are in the correct position for bar code scanning if required 1.4 Blades are sharp and correctly fitted and water for gluing is available 1.5 All tracks and conveyor belts are clean and clear 1.6 Work area is safe and ready for production according to safety requirements |
| 2. Monitor operation | <ul style="list-style-type: none"> 2.1 Machine is jogged to ensure correct positioning and hopper feed operation 2.2 All units are monitored to ensure optimum operation 2.3 Mail is monitored to ensure it moves efficiently through the machine 2.4 Materials are checked and hoppers reloaded as required 2.5 Adjustments are made when the quality standards are not met 2.6 Quality is monitored according to job specifications 2.7 The number of spoils are documented according to enterprise procedures |
| 3. Identify and rectify problems | <ul style="list-style-type: none"> 3.1 Sequence, placement or gluing errors are identified and changes made to guides or on the console as required 3.2 Tracks, conveyors and gluer are cleaned and cleared if lags and jams occur 3.3 Faulty performance of equipment is identified and reported according to enterprise procedures 3.4 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards |

- | | | | |
|----|-----------|-----|---|
| 4. | Pack mail | 4.1 | Addressed mail is unloaded and checked for quality |
| | | 4.2 | Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications |
| | | 4.3 | Sequence numbers and postcodes are in correct pre-sort order ensuring job continuity |
| | | 4.4 | The job is reconciled and documented and supervisor is notified if job does not reconcile |
| | | 4.5 | The machine is cleared and stock put away |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- OHS in relation to lifting materials
- Literacy skills to read job specifications
- Basic numeracy skills to reconcile mail
- Basic materials handling and use of technology skills
- Literacy skills to read job specifications and document an information matching trail
- Effective communication with colleagues and supervisors
- Teamwork with colleagues and supervisors to maintain the production process
- Identifying problems and faults and developing solutions
- Planning and organising to ensure that materials are in the correct order and are collated correctly

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Machine | • Cheshire machine |
| Materials | • Cheshire labels or gummed labels that can be used on a Cheshire machine, water or glue |
| Mailing procedures | • Job could be mailed or returned to client |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Ensure addresses are affixed securely and in the correct position and any production problems are fixed with minimum downtime
- Demonstrate all safety devices on the machine
- The individual must complete TWO entire jobs within enterprise accepted timeframes
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- A Cheshire labelling machine

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU243B Reconcile process outputs.

ICPCF208B**Unit Descriptor****Employability Skills****Application of the Unit****Set up and operate a cheque mailer machine**

This unit describes the performance outcomes, skills and knowledge required to safely set up and operate a cheque mailer machine.

This unit contains employability skills.

This unit requires the individual to safely set up, operate and monitor a cheque mailer machine. The individual will be required to rectify any production faults but not machinery problems. The individual will off load the completed books and correctly pack and complete reconciliation requirements.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 The books are checked and in correct order and position for the job 1.3 First and last name listings are checked as correct 1.4 The correct envelopes are obtained from enterprise storage area and water container is checked 1.5 Envelopes are correctly loaded and hopper guides adjusted according to job specifications 1.6 Books are correctly loaded and book feeder adjusted according to job specifications 1.7 All feeders and conveyor belts are clean and clear 1.8 Work area is safe and ready for production according to safety requirements |
| 2. Monitor operation | <ul style="list-style-type: none"> 2.1 Machine is jogged to ensure correct positioning and hopper feed operation 2.2 Books and envelopes are replenished to ensure continuous supply 2.3 Books and envelopes are continuously monitored for faulty work and put aside securely for remake |
| 3. Reconcile job | <ul style="list-style-type: none"> 3.1 The sequence of names is checked against job specifications / listing sheet 3.2 The number of spoils are documented according to enterprise procedures 3.3 The details of the spoils are marked off on job documentation and the supervisor is notified 3.4 All remaining documentation is completed according to reconciliation and security requirements |
| 4. Complete job | <ul style="list-style-type: none"> 4.1 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications 4.2 Faulty work is disposed of according to security requirements 4.3 The machine is cleared and stock put away according to security requirements |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills to read job specifications and complete workplace documentation
- Basic numeracy skills to reconcile mail
- Organising the job by ensuring that materials are in the correct order and position prior to production
- Working in a team by maintaining the production process in association with others
- Using technology such as cheque mailing machines
- Problem solving by identifying and rectifying production faults

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures
- Understanding of security requirements

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Materials	• Envelopes of different sizes, water, glue, cheque books
Mail type	• Full rate, National pre-sort, DPID
Security	• Reconciliation systems, storage and disposal processes
Machine	• Cheque book mailer machine

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Safely operate and monitor a cheque mailer machine and complete all required documentation and reconciliations. This will be done with minimum downtime
- Demonstrate all safety devices on the machine
- The individual will complete TWO entire jobs that include documenting all faults and reconciling the work. This will be done with minimum downtime
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- A cheque mailer machine

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU243B Reconcile process outputs

ICPCF209B**Unit Descriptor****Set up and operate in-line mail machine**

This unit describes the performance outcomes, skills and knowledge required to safely set up and operate an intelligent in-line cut sheet form feeder, folder and inserter mail machine.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to safely set up, operate and monitor an in-line mail machine. The individual will be required to rectify any production problems and replace machinery consumables. The individual will off load the completed packages and correctly pack and label them for further distribution.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Job is signed off by printers and ready for mailing procedures 1.3 Mailing procedures are identified from job specifications 1.4 The materials are checked and in correct order for the job and all sheets are in the correct position for bar code scanning if required 1.5 All tracks and conveyor belts are clean and clear 1.6 Work area is safe and ready for production according to safety requirements |
| 2. Set up job | <ul style="list-style-type: none"> 2.1 The mail type is identified from job specifications 2.2 Number and type of inserts are identified 2.3 Job specifications are entered into console 2.4 Settings are checked against job specifications before production is commenced |
| 3. Monitor operation | <ul style="list-style-type: none"> 3.1 Machine is jogged to ensure correct positioning and hopper feed operation 3.2 All sections of the machine are monitored to ensure optimum operation 3.3 Envelopes are manipulated and fanned to ensure they move efficiently through the machine 3.4 Folds, inserts and envelopes are continuously monitored for defects and defects are put aside for remake 3.5 Materials are checked and hoppers reloaded as required 3.6 Adjustments are made when the quality standards are not met 3.7 Sequence is monitored according to job specifications 3.8 The number of spoils are documented according to enterprise procedures |

- | | |
|----------------------------------|---|
| 4. Identify and rectify problems | <ul style="list-style-type: none"> 4.1 Sequence or inserter errors are identified and bar codes checked and changes entered into console, if required 4.2 Tracks, conveyors and sensors are cleaned and cleared if lags and jams occur 4.3 Any machine consumables needing replacement are replaced or adjusted with a minimum of downtime 4.4 Faulty performance of equipment is identified and reported according to enterprise procedures 4.5 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards |
| 5. Pack envelopes | <ul style="list-style-type: none"> 5.1 Completed envelopes are unloaded and checked for quality 5.2 Completed packages are packed into labelled trays and Australia Post labels are affixed according to job specifications 5.3 Sequence numbers and postcodes are in correct pre-sort order ensuring job continuity 5.4 The job is reconciled and documented and the supervisor is notified if the job does not reconcile 5.5 The machine is cleared and stock put away |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Using technology such as computers and in-line mail machines
- OHS in relation to operating machinery
- Literacy skills to read job specifications and document results of job reconciliation
- Basic numeracy skills to reconcile mail
- Planning and organising by ensuring that materials are in the correct order and position prior to production
- Teamwork by maintaining the production process in association with others
- Problem solving by identifying and rectifying faults in the operation of the machine

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Mailing procedures

- Job could be mailed or returned to client

Materials	<ul style="list-style-type: none"> Printed multiple or single inserts and envelopes, water for gluing
Mail type	<ul style="list-style-type: none"> Full rate, National pre-sort, DPID
Sections	<ul style="list-style-type: none"> Hoppers, folders, inserters, folders, accumulator, sealers, exit conveyors
Machine	<ul style="list-style-type: none"> Intelligent in-line cut sheet form feeder, folder and inserter
Machinery consumables	<ul style="list-style-type: none"> Stacker wheels, belts, suckers, gripper arms, water brush, OMR readers, bar code readers, adjustments to a double detector

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Safely set up, operate and monitor an in-line mail machine and rectify any faults with productions. This will be done with minimum downtime
- Demonstrate all safety devices on the machine
- The individual will set up and complete a job that includes multiple inserts and rectify any routine production problems that occur, with minimum downtime
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- An in-line cut sheet form feeder, folder and inserter

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU243B Reconcile process outputs

ICPCF2101B**Unit Descriptor****Employability Skills****Application of the Unit****Set up and run machine for sewing**

This unit describes the performance outcomes, skills and knowledge required to set up and run a machine for sewn fastening.

This unit contains employability skills.

This unit requires the individual to set up and run a machine for sewn fastening.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--------------------------|---|
| 1. Prepare job | <ul style="list-style-type: none"> 1.1 Job specifications are determined from job documentation or production control system 1.2 Availability of all job related components is checked |
| 2. Set up sewing machine | <ul style="list-style-type: none"> 2.1 Feeder is set up and adjusted according to job specifications 2.2 Different types of thread are set up according to job specifications and thread tension is correct 2.3 Different types of needles are fitted according to job specifications 2.4 The correct sewing tape is attached to the machine according to job specifications 2.5 Hand rules are set according to job specifications 2.6 Timing of the slitter is adjusted according to job specifications |
| 3. Complete work | <ul style="list-style-type: none"> 3.1 The sewing machine is operated safely according to enterprise procedures 3.2 Job is completed in required time 3.3 Samples are continuously monitored for defects and defects are removed 3.4 The locations of all emergency shutdown buttons and triggers are known 3.5 All processed product is stacked and packed in bundles |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Communication when checking and confirming all details required for the job against job specifications
- Problem solving when selecting and checking a sample from the machine to ensure it conforms to the required quality standards
- Planning and organising when preparing the job before setting up the sewing machine; planning the job to meet the required timeframe
- Teamwork by maintaining the production process in association with others
- Use of technology by setting up and operating fastening equipment

Required knowledge:

The following knowledge must be assessed as part of this unit:

- What OHS areas must be addressed when setting up these areas of the machine?
- What can be expected if sewing is not in the right position?
- What is the largest / smallest size bag or sack that can be processed on the machine?
- In what ways can the machines be adapted to facilitate smaller / larger stock?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Sewing tape	• Different widths, stretch tape, back taping
Bag variables	• Multi-wall, bags, sacks, waxed, plastic films
Types of thread	• Cotton, oiled cotton, hemp
Degree of autonomy	• Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set and efficiently operate a machine for sewn fastening according to job specifications and within the production timeframe
- Demonstrate all safety devices on the machine
- Set up and run a machine to produce THREE different sewn products
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- A machine for sewn fastening

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF2104B**Unit Descriptor****Set up single-faced web**

This unit describes the performance outcomes, skills and knowledge required to set up a single-faced web for corrugated board manufacture.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up the reel in-feed, splicer, pre-conditioner, pre-heater, single facer, curing, coating and / or waxing sections of a corrugator.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--------------------------------------|---|
| 1. Prepare for set up | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Set-up is carried out correctly and in minimum time 1.3 Paper / board quantity requirements are estimated, ordered and checked |
| 2. Set up reel transportation system | <ul style="list-style-type: none"> 2.1 Unwind reel is set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to machinery requirements 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications |
| 3. Set up machine for single facing | <ul style="list-style-type: none"> 3.1 Steam delivery system is set up and adjusted to suit corrugating process and according to job specifications 3.2 Corrugating rolls and pressure roll are set to correct pressure 3.3 Starch delivery system is set up and adjusted to suit corrugating process and according to job specifications 3.4 Heat delivery system is set up and adjusted to suit corrugating process and according to job specifications |
| 4. Set up in-line units | <ul style="list-style-type: none"> 4.1 Wax units are set up and adjusted to suit corrugating process and according to job specifications 4.2 Coating units are set up and adjusted to suit corrugating process and according to job specifications 4.3 Slitters are set up and adjusted according to job specifications 4.4 Cut-off knife is set up and adjusted according to job specifications |
| 5. Inspect and adjust quality | <ul style="list-style-type: none"> 5.1 Inspection and / or testing of sample is organised 5.2 Sample is visually inspected and / or tested according to enterprise procedures 5.3 Results are interpreted to determine adjustment requirements 5.4 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Communication by checking and confirming all details required for the job against job specifications
- Problem solving by selecting and checking a sample from the machine to ensure it conforms to the required quality standards
- Planning and organising by preparing the job before setting up the sewing machine; planning the job to meet the required timeframe
- Teamwork by maintaining the production process in association with others
- Use of technology by setting roll pressures, adjusting steam delivery system and calibrating the equipment

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS risks

- What are the significant risks that are posed to workers in this activity?
- What measures are employed to prevent injury and / or illness in the case of the above identified risks?

Paper board identification

- How can the different types / categories of rolled paperboard be accurately identified?
- What sort of end products is commonly made from each of the rolled paperboard types?

Adhesive formulation

- What are the principal components of a typical, single-face corrugated board adhesive?
- How can satisfactory performance of this adhesive be determined?

Materials handling techniques

- What are the main tools and / or equipment items necessary for the efficient handling of paperboard rolls in the corrugation in-feed section?

Setting up machine and support equipment / systems

- What needs to be checked when setting up the machine?
- How do you determine correct settings?

Monitoring automated production

- Which product factors are monitored automatically during production?
- How is this monitoring function achieved?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machines	<ul style="list-style-type: none"> • Range of corrugating machines with manual, semi-automated and fully automated process control systems
In-line processes	<ul style="list-style-type: none"> • Range of wax and coating systems operations, slitters and cutters. Note that slitting and cutting may be separately assessable as flat-bed or rotary cutting
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of board or paper
Substrate handling	<ul style="list-style-type: none"> • Wide reel handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up the reel in-feed, splicer, pre-conditioner, pre-heater, single facer, curing, coating and / or waxing sections of a corrugator
- Set up the reel in-feed, splicer, pre-conditioner, pre-heater, single facer, curing, coating and / or waxing sections of a corrugator for at least TWO different product runs, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- In-line corrugating machinery

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product
- ICPCF231B Set up machine for basic flat-bed cutting
- ICPCF235B Set up machine for basic rotary cutting
- ICPCF281B Set up machine for basic laminating
- ICPCF3105B Produce single-faced web
- ICPSU201B Prepare, load and unload reels and cores on and off machine

ICPCF2106B**Unit Descriptor****Set up double-faced web**

This unit describes the performance outcomes, skills and knowledge required to set up a double-faced web for corrugated board manufacture.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up the reel in-feed, splicer, bridge, pre-heater, double backer, curing, coating and / or waxing sections of a corrugator.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--------------------------------------|---|
| 1. Prepare for set up | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Set-up is carried out correctly and in minimum time 1.3 Paper / board quantity requirements are estimated, ordered and checked |
| 2. Set up reel transportation system | <ul style="list-style-type: none"> 2.1 Unwind reel is set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to machinery requirements 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications |
| 3. Set up machine for double facing | <ul style="list-style-type: none"> 3.1 Starch delivery system is set up and adjusted to suit corrugating process and according to job specifications 3.2 Rider roll is set to correct pressure 3.3 Heat delivery system is set up and adjusted to suit corrugating process and according to job specifications |
| 4. Set up in-line units | <ul style="list-style-type: none"> 4.1 Wax units are set up and adjusted to suit corrugating process and according to job specifications 4.2 Coating units are set up and adjusted to suit corrugating process and according to job specifications 4.3 Tape dispensing units are set up and adjusted to suit corrugating process and according to job specifications 4.4 Slitters are set up and adjusted according to job specifications 4.5 Cut-off knife is set up and adjusted according to job specifications |
| 5. Inspect and adjust quality | <ul style="list-style-type: none"> 5.1 Inspection and / or testing of sample is organised 5.2 Sample is visually inspected and / or tested according to enterprise procedures 5.3 Results are interpreted to determine adjustment requirements 5.4 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit

- Communication by checking and confirming all details required for the job against job specifications
- Problem solving by selecting and checking a sample from the machine to ensure it conforms to the required quality standards
- Planning and organising by preparing the job before setting up the sewing machine; planning the job to meet the required timeframe
- Teamwork by maintaining the production process in association with others
- Use of technology by setting roll pressures, adjusting steam delivery system and calibrating the equipment in a minimum of time
- Interpreting results from gathered information or evidence and making adjustments to equipment

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS risks

- What are the significant risks that are posed to workers in this activity?
- What measures are employed to prevent injury and / or illness in the case of the above identified risks?

Paper board identification

- How can the different types / categories of rolled paperboard be accurately identified?
- What sort of end products is commonly made from each of the rolled paperboard types?

Adhesive formulation

- What are the principal components of a typical double-backed corrugated board adhesive?
- How can satisfactory performance of this adhesive be determined?

Materials handling techniques

- What are the main tools and / or equipment items necessary for the efficient handling of paperboard rolls in the corrugation in-feed section?

Setting up the machine

- What needs to be checked when setting up the machine?
- How do you determine correct settings?

Monitoring automated production

- Which product factors are monitored automatically during production?
- How is this monitoring function achieved?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machines	<ul style="list-style-type: none"> • Range of corrugating machines with manual, semi-automated and fully automated process control systems
In-line processes	<ul style="list-style-type: none"> • Range of wax and coating systems operations, slitters and cutters. Note that slitting and cutting may be separately assessable as flat-bed or rotary cutting
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of board or paper
Substrate handling	<ul style="list-style-type: none"> • Wide reel handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up the reel in-feed, splicer, bridge, pre-heater, double backer, curing, coating and / or waxing sections of a corrugator
- Demonstrate all safety devices on the machine
- Set up the reel in-feed, splicer, bridge, pre-heater, double backer, curing, coating and / or waxing sections of a corrugator for at least TWO different product runs, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment will take place on the job
- In-line corrugating machinery

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product
- ICPCF231B Set up machine for basic flat-bed cutting
- ICPCF235B Set up machine for basic rotary cutting
- ICPCF3107B Produce double-faced web
- ICPSU201B Prepare, load and unload reels and cores on and off machine

ICPCF2108B**Unit Descriptor****Employability Skills****Application of the Unit****Produce basic folded and glued cartons**

This unit describes the performance outcomes, skills and knowledge required to produce basic folded and glued cartons.

This unit contains employability skills.

This unit requires the individual to produce basic folded and to glued cartons and correctly shut down machinery when the job is completed.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|---|
| 1. Maintain operation of carton blank system | <ul style="list-style-type: none"> 1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Carton blank pick-up and transport system is monitored and adjusted to ensure accurate and continuous carton blank handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous carton blank handling and efficient operation 1.4 Delivery is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain basic gluing and continuous folding process | <ul style="list-style-type: none"> 2.1 Registration and squareness of fold are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 2.2 Registration of gluing is monitored and adjusted to ensure quality of product meets the standard of approved sample 2.3 Adhesion is monitored and adjusted to ensure quality meets the standard of approved sample |
| 3. Maintain production process | <ul style="list-style-type: none"> 3.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 3.3 Performance is monitored and verified using the process control system according to enterprise procedures 3.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.5 Process adjustments to eliminate problems are reported according to enterprise procedures 3.6 Faulty performance of equipment is identified and reported according to enterprise procedures 3.7 Waste is sorted according to procedures |

- 4. Identify and rectify minor problems
 - 4.1 Problems in folding operation are identified and reported according to enterprise procedures
 - 4.2 Adjustments or corrections are carried out according to enterprise procedures
 - 4.3 Folding is checked to ensure correct operation
 - 4.4 Problems in gluing unit are identified and reported according to enterprise requirements
 - 4.5 Adjustments or corrections are carried out according to enterprise procedures and consistent with operator's skill level
 - 4.6 Gluing unit operation is checked to ensure correct operation

- 5. Conduct shutdown of production process
 - 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 5.3 Glue system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 5.4 Waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 5.5 Machine faults requiring repair are identified and reported to designated person, according to enterprise procedures
 - 5.6 Repair / adjustment is verified prior to resumption of operations
 - 5.7 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Communication by checking and confirming all details required for the job against job specifications or production control system
- Problem solving by interpreting results from gathered information or evidence and making adjustments to equipment
- Planning and organising by preparing the job before setting up the sewing machine planning the job to meet the required timeframe
- Teamwork by maintaining the production process in association with others
- Use of technology by using carton folding and gluing machines

Required knowledge:

The following knowledge must be assessed as part of this unit:

Sheet transportation and delivery systems

- What OHS factors must be considered when setting and / or operating machine delivery systems?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What needs to be checked when substrate is removed from the machine?

Maintaining basic folding and gluing processes

- What OHS factors must be considered when using the folder / gluer machine?
- What are THREE areas to continually observe to ensure the smooth trouble-free operation of the machine?
- How is glue application adjusted?

Faults and minor problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- What are TWO causes of out-of-square folding and explain how each may be corrected?
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if the job is out-of-square?
- What communication action should be instigated if ink is too wet for production?
- What communication action should be instigated if the job does not coincide with the sample?
- What part(s) of the machine should be adjusted if carton blanks are creasing?
- What factors cause poor glue adhesion on cartons?

Machine shutdown and cleaning

- What OHS factors must be considered when cleaning the machine?
- What important tasks must be performed to correctly shut down the machine?
- How should the finished work be prepared for dispatch?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What quality aspects should be considered in a completed folded job?
- In what way might production need to be altered to meet client requirements?

Information sources

- What machine manuals and safety documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machinery	<ul style="list-style-type: none"> • A Royal 40, a Bobst Media, a Bobst Domino
Product	<ul style="list-style-type: none"> • Straight line folded and glued cartons of different sizes and weights
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a range of simple straight line folded and glued cartons on one of the following machines: a Royal 40, a Bobst Media or a Bobst Domino
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Produce at least FOUR simple straight line folded and glued cartons of different sizes and weights according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- For example a Royal 40, a Bobst Media or a Bobst Domino

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF220B**Unit Descriptor****Employability Skills****Application of the Unit****Unit Sector****Produce basic converted or finished product**

This unit describes the performance outcomes, skills and knowledge required to cover most converting and finishing operations.

This unit contains employability skills.

The unit requires the individual to maintain substrate operations and to complete relevant finishing processes.

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain operation of reel (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and rewind is monitored and adjusted to ensure efficient continuous operation and to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added and removed to and from the process according to job specifications 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain operation of sheet system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to process according to job specifications |
| 3. Maintain basic cutting or embossing process (IF RELEVANT) | <ul style="list-style-type: none"> 3.1 Cutting edge and knife or die condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting / embossing pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of cutting devices and knives or dies is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting / embossing devices is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

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| 4. | Maintain folding process | 4.1 | Registration and squareness of fold are monitored and adjusted to ensure the quality of product meets the standard of the approved sample, if relevant |
| | | 4.2 | Collating / inserting process is monitored and adjusted to ensure quality of product meets the standard of the approved sample, if relevant |
| 5. | Maintain basic fastening (adhesive / mechanical / thermal) process (IF RELEVANT) | 5.1 | Registration of fastening is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 5.2 | Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample OR |
| | | 5.3 | Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample OR |
| | | 5.4 | Power current and dwell time is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| 6. | Maintain basic laminating process (IF RELEVANT) | 6.1 | Registration of laminating is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 6.2 | Pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 6.3 | Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 6.4 | Basic in-line printing / coating processes are monitored and adjusted to ensure the quality of product meets the standard of the approved sample |
| 7. | Maintain production process | 7.1 | Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule |
| | | 7.2 | Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures |
| | | 7.3 | Manual and / or automatic control is used according to job specifications |
| | | 7.4 | Performance is monitored and verified using the process control system according to enterprise procedures |
| | | 7.5 | Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention |
| | | 7.6 | Process adjustments to eliminate problems are reported according to enterprise procedures |
| | | 7.7 | Faulty performance of equipment is identified and reported according to enterprise procedures |
| | | 7.8 | Waste is sorted according to enterprise procedures |

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| 8. Identify and rectify problems or faults | 8.1 Product and substrate are monitored and tested to ensure conformance to client requirements |
| | 8.2 Problems in converting / finishing machine operation are identified and reported according to enterprise procedures |
| | 8.3 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level |
| | 8.4 Converting / finishing machine operation is checked to ensure correct operation |
| 9. Conduct shutdown of production process | 9.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures |
| | 9.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements |
| | 9.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures |
| | 9.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures |
| | 9.5 Repair / adjustment is verified prior to resumption of operations |
| 10. Clean converting / finishing machine at end of run | 10.1 Cutting units are disengaged and cleaned ready for next run |
| | 10.2 Cutting devices are sharpened according to OHS procedures |
| | 10.3 Machine bed is cleaned ready for next run |
| | 10.4 Cutting devices and knives are cleaned or replaced ready for next run |
| | 10.5 All units are disengaged and cleaned ready for next run |
| | 10.6 Adhesive or glue system is washed up ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures |
| | 10.7 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run OR |
| | 10.8 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run |
| | 10.9 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Communication by accurately completing production records according to enterprise procedures
- Problem solving by identifying and communicating problems with the operations of the converting / finishing machines
- Interpreting results from gathered information or evidence and making adjustments to equipment
- Planning and organising by cleaning a converting / finishing machine prior to commencement of the next run
- Teamwork by maintaining the production process in association with others
- Use of technology by monitoring and adjusting cutting edges, knives and or dies

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?

Section transport and delivery systems

- What OHS factors should be considered in the transport and delivery areas of the machine?
- Name THREE procedures that will ensure smooth transport of sections through the machine.
- What steps can be taken to ensure smooth delivery of sections?
- List FOUR important factors to consider when setting the feeder.
- Explain the setting of the double / misfeed sheet calliper system.
- Name the different types of sheet / section delivery systems.

Paper sizes and weights

- What is the largest and smallest sheet or section size that can be run through this machine?
- Which areas of the machine should be adjusted to allow for 42 gsm stock?

Maintenance of cutting processes

- What OHS factors must be considered when maintaining the cutting process?
- What indicators demand the replacement of a knife?
- How is cutting pressure adjusted?
- In what ways can the waste (offcut) be removed from the work area?

- What are FOUR important points to monitor when maintaining the cutting process which will ensure that the machine can be kept running without interruption?

Cutting machine faults and problems

- What OHS factors must be considered when problem solving on the machine maintaining the cutting process?
- What needs to be checked when packing cutting devices?
- Explain the procedure for correcting THREE common machine faults.
- When trimming, what will need to be adjusted if the cover is marked (scuffed)?

Maintaining basic folding processes

- What OHS factors must be considered when using the folding machine?
- What are THREE areas to continuously observe to ensure the smooth trouble-free operation of the machine?
- What areas of the in-line process should be monitored to assure the quality of the product?

Folding machine faults and minor problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- What are TWO causes of out-of-square folding and explain how each may be corrected?
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if job is out-of-square?
- What communication action should be instigated if the ink is too wet for production?
- What communication action should be instigated if the job does not coincide with the sample?
- What parts of the machine should be adjusted if the sheet is creasing?

Collating machine operation

- What OHS factors should be considered when operating the machine?
- What factors govern the speed at which the machine will operate?
- What would indicate that the machine was in need of lubrication?

Collating problems and fault correction

- What OHS factors should be considered before readjusting the machine?
- What method of correction is needed to prevent double sheet feeds?
- Under what circumstances would the machine need to be adjusted?
- What would constitute an acceptable collating result?
- What are FOUR items that must be checked against the client's sample?

Maintaining basic fastening (adhesive / mechanical / thermal) process

- What OHS factors must be considered when using hot melt adhesive?
- What safety clothing is available for use when operating adhesive binders?
- What OHS factors should be considered before readjusting the machines?
- What areas of the in-line process should be monitored to assure the quality of the product?
- Name TWO sectors to observe to ensure that the production process is trouble-free and continuous.

Fastening operating problems and minor fault correction

- When would the machine need to be adjusted?

- For an adhesive binder how is adhesive application adjusted?
- For a wire stitcher how can the wire be straightened in the wire feed?
- For a high frequency welder what are TWO possible reasons for the welding being unsuccessful?
- What quality aspects should be considered in a completed adhesive-bound job?
- What quality aspects should be considered in a completed high frequency welded job?
- What quality aspects should be considered in a completed wire-stitched job?
- In what way might production need to be altered to meet client requirements?

Maintaining laminating production processes

- What OHS factors must be considered when maintaining the laminating and in-line processes?
- How is registration of laminating assured?
- What areas of the in-line processes should be monitored to ensure a quality product?

Laminating operating problems and minor fault correction

- What are TWO laminating problems that may occur during the operation of the machine?
- What adjustments or correction procedures may need to be made to ensure accurate operation of the process?
- What quality aspects should be considered in a completed laminated job?
- In what way might production need to be altered to meet client requirements?

Machine shutdown procedures

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked during the machine shutdown procedure?
- What needs to be checked when the cutting devices or knives are cleaned or replaced ready for the next run?
- What areas of the machine require cleaning at the end of the run?
- What materials need to be cleaned from the machine?
- How should the finished work be prepared for dispatch?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What features need to be checked on the finished product?
- What are THREE common faults that cause product to be rejected, and how can they be fixed / avoided?
- What testing procedures are available and why are they used?
- What production records need to be kept or written up?
- What information should be included in this reporting procedure?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Converting / finishing processes	<ul style="list-style-type: none"> • Single or multiple knife, manual or programmable 3- or 5-knife trimmers and spine trimmers • Flat-bed or rotary die or forme cutting, embossing, flat-bed or rotary hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, pin perforating, indexing, round cornering • Single, parallel or continuous folding of sheets, book sections or other products of identical or varied form, weight, shape • Collating / inserting of sheets or book sections of identical form, weight, shape • Adhesive fastening such as cold and hot melt gluing, taping • Mechanical fastening such as riveting, string and wire stitching, and wire binding • Thermal fastening such as high frequency and heat welding • Moisture, chemical and thermal cured and extrusion laminating processes
Equipment	<ul style="list-style-type: none"> • Either single process machines or multiple process machines
Shapes for die cutting	<ul style="list-style-type: none"> • Simple or single shapes
Cutting units	<ul style="list-style-type: none"> • A range of machines with dies or cutting formes or 3-knife trimmers and spine trimmers with manual, semi-automated fully automated or computerised process control
Folding units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
Collating units	<ul style="list-style-type: none"> • A range of suction and friction feed machines with manual, semi-automated, fully automated or computerised process control
Fastening units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control

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|------------------------------|--|
| Complexity for fastening | <ul style="list-style-type: none">• Basic refers to simple hand-fed or single-head adhesive and thermal machines, single-head mechanical machines |
| Laminating units | <ul style="list-style-type: none">• Range of manual, semi-automated, fully automated and computerised process control |
| Laminating adhesives | <ul style="list-style-type: none">• Range of single or two-component adhesives used in laminating |
| In-line processes | <ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as numbering, date stamping that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg printing or coating) it should be assessed as such |
| Cutting or embossing process | <ul style="list-style-type: none">• Flat-bed / rotary / trimming |
| Substrate types | <ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal |
| Substrate handling | <ul style="list-style-type: none">• Wide or narrow reel or large or small sheet or large or small book or section handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly maintain substrate operation and complete relevant finishing process according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on any converting or finishing equipment (whether involving one process or a sequence of processes)
- Demonstrate all safety devices on the machine
- On the chosen equipment TWO different jobs must be demonstrated preferably involving different types, sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

NOTE: in the case of stand alone minor flat-bed or rotary cutting processes (as in ICPCF231B Set up machine for basic flat-bed cutting and ICPCF235B Set up machine for basic rotary cutting) THREE processes must be demonstrated.

- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- any converting, binding and finishing basic set up units.

ICPCF221B**Set up and produce basic guillotined product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to perform basic manual guillotining.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to produce basic guillotined product.

Knife installation is part of ICPCF321B Set up and produce complex guillotined product.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Grip and lay edges of sheet are identified |
| 2. Check knife sharpness | <ul style="list-style-type: none"> 2.1 Knives are checked for appropriate sharpness 2.2 Dull knives are reported and arrangements made for them to be changed 2.3 Cutting sticks are replaced when necessary |
| 3. Set up machine for basic guillotining | <ul style="list-style-type: none"> 3.1 Guillotine is manually set up and adjusted according to job specifications 3.2 Clamping pressures are set up and adjusted according to job specifications |
| 4. Conduct simple cut | <ul style="list-style-type: none"> 4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures |
| 5. Organise sample inspection and / or testing | <ul style="list-style-type: none"> 5.1 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 5.2 Results are interpreted to determine adjustment requirements 5.3 Adjustment changes are carried out according to product and machine specifications |
| 6. Maintain basic guillotining process | <ul style="list-style-type: none"> 6.1 Knife and cutting stick condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample 6.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 6.3 Registration of knives is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

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| 7. Maintain production process | <ul style="list-style-type: none"> 7.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 7.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 7.3 Manual and / or automatic control is used according to job specifications 7.4 Performance is monitored and verified using the process control system according to enterprise procedures 7.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 7.6 Process adjustments to eliminate problems are reported according to enterprise procedures 7.7 Faulty performance of equipment is identified and reported according to enterprise procedures 7.8 Waste is sorted according to enterprise procedures |
| 8. Identify and rectify problems and faults | <ul style="list-style-type: none"> 8.1 Problems in guillotining machine operation are identified and reported according to enterprise procedures 8.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 8.3 Guillotining machine operation is checked to ensure correct operation |
| 9. Conduct shutdown of production process | <ul style="list-style-type: none"> 9.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 9.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 9.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 9.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 9.5 Repair / adjustment is verified prior to resumption of operations |
| 10. Clean guillotining machine at end of run | <ul style="list-style-type: none"> 10.1 Knives are replaced and cleaned ready for next run 10.2 Machine bed is cleaned ready for next run 10.3 Cutting units are disengaged and cleaned ready for next run 10.4 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- Communication by accurately completing production records according to enterprise procedures
- Problem solving by identifying and reporting faults in machine operation according to enterprise procedures
- Planning and organising by setting up the machine in minimum time with minimal wastage
- Teamwork by maintaining the production process in association with others and organising a sample inspection
- Use of technology by setting up a machine for basic cutting

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning cutting should be found in the job documentation or production control system?

Checking guillotine knives

- What OHS factors must be considered when handling knife blades during the knife change operation?
- What factors indicate a new blade is needed?
- What can occur if a dull blade is continuously used?
- How do you tell a sharp knife from a dull knife?
- When is it necessary to replace a cutting stick?

Guillotine set up and operation

- What OHS factors must be considered when setting up and operating the machine?
- What factors should be considered when setting up a guillotine for cutting?
- How is the correct clamping pressure chosen for a given job?

Checking and adjustment

- What OHS factors must be considered when checking and adjusting the machine?
- What aspects of the cutting result should be checked against the sample?
- What steps should be taken if the cutting result does not coincide with the sample

Maintaining cutting process

- What OHS factors must be considered when maintaining the production process?
- What reporting procedures should be followed if the machine malfunctions?
- How should waste from the guillotine be treated / disposed of?

Identifying and rectifying cutting faults

- What part of the guillotine should be checked if, after a cut, the top sheets are out-of-square?
- What part of the guillotine should be checked if, after a cut, the top sheets are creasing across the cut line?
- How do you recognise the need for machine lubrication?

- Where do you find out information about correct types and methods of lubrication?

Shutting down and cleaning machine

- What OHS factors must be considered when shutting down or cleaning a machine?
- What special operations are essential when shutting down the machine?

Quality assurance

- What quality aspects should be considered in a completed cutting job?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	• Single knife, manual guillotines
Cutting sequence	• Simple cutting sequence
Cutting units	• Range of semi-automated, hand feed or delivery, low volume / speed guillotines
Substrates	• Range of substrates in categories of paper, paperboard, corrugated board, plastics
Substrate handling	• Large or small sheet handling systems
Degree of autonomy	• Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly produce basic guillotined product according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up (not including knife change) and produce TWO basic guillotined products (if possible one large sheet and one small sheet) according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPSU208B Operate and monitor machines (basic)

ICPCF222B**Unit Descriptor****Set up and operate in-line cutter**

This unit describes the performance outcomes, skills and knowledge required to safely set up and operate an in-line cutter set for high run jobs.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to safely set up and operate an in-line cutter set for high run jobs and to pack the product for the next stage in the process.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---------------------------|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or process control system 1.2 Job is signed off from previous process and ready for mailing procedures 1.3 The materials are checked and in correct order for the job 1.4 Work area is safe and ready for production according to safety requirements |
| 2. Set up job | <ul style="list-style-type: none"> 2.1 Job specifications are entered into console according to job specifications 2.2 Guides and guards and cut depth are correctly set and positioned according to job specifications 2.3 Settings are checked against job specifications before production is commenced 2.4 Settings are tested with a product sample and adjustments are made if necessary |
| 3. Operate in-line cutter | <ul style="list-style-type: none"> 3.1 Product is loaded in correct position according to job specifications 3.2 Quality check is carried out and defective product is removed according to enterprise procedures 3.3 Adjustments are made when the quality standards are not met 3.4 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards |
| 4. Pack cut product | <ul style="list-style-type: none"> 4.1 Completed product is unloaded and checked for quality 4.2 Completed product is packed into labelled trays ensuring job / order continuity for transfer to the next process 4.3 Documentation relating to the product is completed correctly 4.4 The machine is cleared and stock put away |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills to read job specifications and to complete workplace documentation
- Organising the job by organising materials in the correct order for the job prior to commencement
- Working in a team by maintaining the production process in association with others
- Using technology such as the computer console to select settings for the job
- Problem solving by making adjustments to machine settings to improve the product's quality

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Waste disposal procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machinery

- An in-line cutter set for high run jobs

Product/ materials

- Books, CD-ROMs, DVDs, sheet stock, laminates, film

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Safely operate an in-line cutter. The in-line cutter is set up to meet the job specifications with minimum downtime. The individual will monitor for quality during the process and at the end when packing the product
- The individual will finish TWO complete jobs on an in-line cutter including packing the product for the next stage in the process
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- An in-line cutter

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF223B**Unit Descriptor****Employability Skills****Application of the Unit****Set up machine for cutting (trimming)**

This unit describes the performance outcomes, skills and knowledge required to set up knife trimmers and spine trimmers.

This unit contains employability skills.

This unit requires the individual to set up 3- or 5-knife trimmers or spine trimmers. Some equipment may also involve gathering (collating) and fastening, which may be assessed at the same time.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Install and replace cutting knives into machine | <ul style="list-style-type: none"> 2.1 Appropriate knives are selected and secured to the machine 2.2 Dull blades are securely bolted into protective holder |
| 3. Set up section transportation system | <ul style="list-style-type: none"> 3.1 Feeder is set up and adjusted according to job specifications 3.2 Section pick-up and transportation system is set up and adjusted according to job specifications 3.3 Transfer systems are set up and adjusted according to job specifications |
| 4. Set up stacking system | <ul style="list-style-type: none"> 4.1 Delivery is set up and adjusted according to job specifications 4.2 Section transfer and control system is set up and adjusted according to job specifications |
| 5. Set up machine for trimming | <ul style="list-style-type: none"> 5.1 Trimmer knives are set up and adjusted according to job specifications 5.2 Clamping pressures are set up and adjusted according to job specifications 5.3 Stops and lays are set to remove desired trim |
| 6. Conduct sample run | <ul style="list-style-type: none"> 6.1 Material to be used for sample is organised correctly 6.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures 6.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 6.4 Results are interpreted to determine adjustment requirements 6.5 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following knowledge must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills to read job specifications and to complete workplace documentation
- Organising such as laboratory testing and preparing materials and equipment for production
- Working in a team by maintaining the production process in association with others
- Using technology setting up the machine for cutting and trimming
- Problem solving by setting up and adjusting delivery system according to job specifications

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information should you find on a job ticket or production control system?

Installing or replacing cutting knives

- What OHS factors must be considered when handling knife blades during the knife change operation?
- What safety devices must be used when replacing trimmer knives?
- How should trimmer knives be transported to and from the machine?
- What are the recommended knife angles for the trimming machine?
- What factors indicate a new blade is needed?
- What can occur if a dull blade is continuously used?
- How do you tell a sharp knife from a dull knife?
- When is it necessary to replace a cutting stick?

Setting up transportation systems

- What OHS factors must be considered when setting up transportation systems?
- When would belt timing need to be readjusted?
- What should be adjusted to ensure book is fast against book stops?
- What determines the book transport speed?
- What should be adjusted if the book is out-of-square?
- What should be adjusted if the book is scratching or "scuffing"?

Setting up stacking systems

- What OHS factors must be considered when setting up three-knife stacking systems?
- What danger areas exist at the delivery end of the book trimming machine?
- What problems can be expected in the delivery area of the machine?
- How is the batching device activated?

Setting up machine for cutting (trimming)

- What OHS factors must be considered when setting up the trimming unit?
- What machinery safeguards are to be considered when setting up the trimmer?
- How is the clamp pressure for each job determined?
- What evidence indicates that the clamp pressure is insufficient?

- When is it necessary to replace the knives?
- What important elements must be considered when moving knives to suit a different size book?
- How would the machine be adjusted to remove more offcut from the fore edge of the book?
- How would the machine be adjusted to remove more offcut from the head and tail of the book?
- What important elements must be considered when moving knives to suit maximum / minimum size?

Quality assurance

- What are FOUR areas to check on the final job sample?
- Explain how it is recommended to correct the following problems: book out-of-square, book scuffing, wrong sections, incorrect cover creasing, wrong wire stitch positions, wrong sheet / section sequence, wet ink problems, book spines "bursting", waste not transferring from cut line?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Single or multiple knife, manual or programmable 3- or 5-knife trimmers and spine trimmers
Cutting units	<ul style="list-style-type: none"> • Range of semi-automated, automated or computerised 3- or 5-knife trimmers and spine trimmers
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics
Substrate handling	<ul style="list-style-type: none"> • Large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up trimming machines according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
 - Book block trimmer OR single section copy trimmer (3-knife section gather / stitch / trim) OR
 - Single section copy trimmer (1- or 3-knife multiple flat sheet gather / fold / stitch / trim) OR
 - 5-knife trimmer
- on TWO occasions using: different grammage or thickness of section or books AND different size alterations (eg A4 to A5)
- Apply these operations according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic).

ICPCF224B**Unit Descriptor****Produce cut (trimmed) product**

This unit describes the performance outcomes, skills and knowledge required to produce a knife trimmed product using a single or multiple knife trimmer or spine trimmer.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to produce a trimmed product, maintain the production process, monitor machinery for faults and problems, and rectify minor problems according to enterprise procedures.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain operation of transportation system | 1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to the machine
1.2 Section pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet / section / book handling and efficient operation
1.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation
1.4 Substrate is added to the process according to job specifications |
| 2. Maintain section delivery system | 2.1 Delivery is monitored and adjusted to ensure quality and efficient product delivery |
| 3. Maintain cutting (trimming) process | 3.1 Knife condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample
3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
3.3 Registration of knife(s) is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- 4. Maintain production process
 - 4.1 In-line printing / converting / binding / finishing processes are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 4.4 Manual and / or automatic control is used according to job specifications
 - 4.5 Performance is monitored and verified using the process control system according to enterprise procedures
 - 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 4.9 Waste is sorted according to enterprise procedures
- 5. Identify and rectify problems and faults
 - 5.1 Problems in cutting (trimming) machine operation are identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 5.3 Cutting (trimming) machine operation is checked to ensure correct operation
 - 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations
- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
- 7. Clean machine
 - 7.1 Knife(s), cutting sticks and machine bed are cleaned ready for next run
 - 7.2 Cutting machine is disengaged and cleaned ready for next run
 - 7.3 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 7.4 Section feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 7.5 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills to read job specifications and to complete workplace documentation
- Planning and organising when shutting down equipment
- Teamwork by maintaining operations with fellow workers
- Using technology to set up and maintain machinery
- Problem solving to identify and rectify problems

Required knowledge:

The following knowledge must be assessed as part of this unit:

Section transport and delivery systems

- What OHS factors should be considered in the transport and delivery areas of the machine?
- Name THREE procedures that will ensure smooth transport of sections through the machine.
- What steps can be taken to ensure smooth delivery of the sections?

Cutting (trimming) processes and faults

- What OHS factors should be considered while the trimming process is operational?
- In what ways can the waste (offcut) be removed from the work area?
- What are FOUR procedures that will ensure that the machine can be kept running without interruption?
- What will need to be adjusted if the cover is marked (scuffed)?

Basic in-line processes

- Name THREE in-line processes associated with the machine.

Shutdown and cleaning procedures

- What OHS factors must be considered when conducting machine shutdown, maintenance and cleaning procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked during the machine shutdown procedure?
- What areas of the machine require cleaning at the end of the run?

Quality assurance

- What quality aspects should be considered in a completed cutting job?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Cutting process | <ul style="list-style-type: none"> • Single or multiple knife, manual or programmable 3- or 5-knife trimmers and spine trimmers |
| Cutting units | <ul style="list-style-type: none"> • Range of semi-automated, automated or computerised 3-knife trimmers and spine trimmers |
| Substrate types | <ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal • Large or small book handling systems |
| Degree of autonomy | <ul style="list-style-type: none"> • Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce accurately trimmed products within required production schedule timeframes
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Use a three-knife trimming unit to complete THREE jobs of various types, sizes and thicknesses of substrate according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF221B Set up and produce basic guillotined product
- ICPCF235B Set up machine for basic rotary cutting
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)

ICPCF225B**Set up machine for basic flat-bed die cutting or embossing****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for basic flat-bed die cutting or embossing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for basic flat-bed die cutting or embossing.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Prepare job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Prepare cutting or embossing devices | <ul style="list-style-type: none"> 2.1 Appropriate cutting devices or dies are selected and secured to machine according to job specifications 2.2 Cutting devices or dies are registered and proofed according to job specifications 2.3 Cutting devices or dies are correctly mounted |
| 3. Set up reel transportation system (OR Element 4) | <ul style="list-style-type: none"> 3.1 Unwind reel is set up and adjusted according to job specifications 3.2 Webbing procedures are carried out according to job specifications 3.3 Web control system is set up and adjusted according to job specifications 3.4 Reels are spliced / joined according to job specifications 3.5 Folder and sheeter are set up and adjusted according to job specifications |
| 4. Set up sheet transportation system (OR Element 3) | <ul style="list-style-type: none"> 4.1 Feeder and delivery systems are set up and adjusted according to job specifications 4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications 4.3 Transfer systems are set up and adjusted according to job specifications 4.4 Substrate is added to and removed from the process according to job specifications 4.5 Sheet transfer and control system is set up and adjusted according to job specifications |
| 5. Set up machine | <ul style="list-style-type: none"> 5.1 Flat-bed cutting or embossing devices are set up and adjusted according to job specifications 5.2 Cutting / embossing pressures are set up and adjusted according to job specifications 5.3 Machine lays are set to correct position for registration |

- 6. Set up in-line units for basic processes
 - 6.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications
 - 6.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards)

- 7. Conduct sample run
 - 7.1 Material to be used for sample is organised correctly
 - 7.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 7.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 7.4 Results are interpreted to determine adjustment requirements
 - 7.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when reading and interpreting job specifications and completing workplace documentation
- Planning by checking availability of all components and organising laboratory testing
- Teamwork when giving assistance during the set up of major in-line printing / binding / converting units by maintaining operations with fellow workers
- Using technology by adjusting the machine to facilitate accurate sheet pick-up and transportation
- Problem solving by interpreting test results and adjusting the machine as required

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning die cutting or embossing would you expect to find in the job documentation or production control system?

Mounting flat-bed cutting devices

- What needs to be checked when mounting cutting devices on a flat-bed?
- What needs to be checked when registering and proofing the cutting devices?

Installing flat-bed cutting devices

- What needs to be checked when securing the cutting devices to the machine?
- What criteria determine the selection of particular cutting devices?

Reel transportation system on web-fed machines

- What OHS concerns are there when setting up reel transportation systems?
- What adjustments to the unwind reel may be needed to suit various jobs?
- What are the important areas to be considered during webbing procedures?

Sheet transportation system on sheet-fed machines

- What OHS concerns are there when setting up sheet transportation systems?
- What are FOUR important areas to check during the feeder unit set up?
- What adjustments can be made to the machine to facilitate accurate sheet pick-up and transportation?

Reel delivery system on web-fed machines

- What important areas of the reel delivery system may need to be adjusted according to job specifications?
- What steps should be taken to ensure that the delivery system operates effectively?

Sheet delivery system on sheet-fed machines

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the delivery system should be observed to prevent damage to the finished

product?

- What are FOUR ways in which the folded sheets can be secured for dispatch?

Setting up machines for basic flat-bed die cutting or embossing

- What OHS factors must be considered when setting up cutting devices?
- What needs to be checked when setting up, adjusting and operating flat-bed cutting devices?
- How is the machine pressure determined?
- How are the machine cutting depths determined?

Basic in-line processes

- When would it be necessary to adjust in-line units?
- What areas should be checked to ensure the suitability of in-line processes?

Quality assurance

- What details of the completed sample should be examined to ensure conformance with the client's requirements?
- What product testing procedures are available and how often should they be used?
- What common faults can occur with the flat-bed cutting process?
- What factors indicate a need for the replacement of knives / blades / cutting edges?
- How should the cutting edges be stored to guard against damage and deterioration?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	• Flat-bed die and forme cutting, embossing
Shapes	• Simple or single shapes
Flat-bed cutting units	• A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control

In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up a machine for basic flat-bed die cutting or embossing according to job specifications and within the production timeframe
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on EITHER flat-bed die cutting OR embossing. For either process set up TWO jobs changing the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF220B Produce basic converted or finished product

ICPCF226B**Produce basic flat-bed die cut or embossed product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce either a flat-bed die cut or embossed product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to produce either a flat-bed die cut or embossed product and then clean down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain operation of reel (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and rewind reel are monitored and adjusted to ensure efficient continuous operation and to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from the process according to job specifications 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain operation of sheet transportation system on sheet-fed machine (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to process according to job specifications |
| 3. Maintain basic flat-bed cutting process | <ul style="list-style-type: none"> 3.1 Cutting edge and knife condition are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of cutting devices and knife(s) is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.5 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample |

- 4. Maintain production process
 - 4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 4.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 4.3 Manual and / or automatic control is used according to job specifications
 - 4.4 Performance is monitored and verified using the process control system according to enterprise procedures
 - 4.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 4.6 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.7 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 4.8 Waste is sorted according to enterprise procedures
- 5. Identify and rectify problems
 - 5.1 Problems in cutting (flat-bed) machine operation are identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 5.3 Cutting (flat-bed) machine operation is checked to ensure correct operation
- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 6.5 Repair / adjustment is verified prior to resumption of operations
- 7. Clean flat-bed cutting machine at end of run
 - 7.1 Cutting devices and knife(s) are cleaned or replaced ready for next run
 - 7.2 Cutting devices are sharpened
 - 7.3 Machine bed is cleaned ready for next run
 - 7.4 Cutting units are disengaged and cleaned ready for next run
 - 7.5 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 7.6 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 7.7 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 7.8 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when reading and interpreting job specifications and completing workplace documentation
- Planning and organising by correctly organising the materials to be used
- Teamwork by maintaining operations with fellow workers
- Using technology by adjusting machine devices and transportation systems
- Problem solving by interpreting test results and adjusting the machine as required

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?

Maintenance of cutting process (flat-bed and in-line)

- What OHS factors must be considered when maintaining the cutting process?
- What indicators demand the replacement of a knife?
- How is cutting pressure adjusted?

Cutting machine faults and problems

- What OHS factors must be considered when problem solving on the machine maintaining the cutting process?
- What needs to be checked when packing cutting devices?
- Explain the procedure for correcting THREE common machine faults.

Machine shutdown procedures

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked during machine shutdown procedures?
- What needs to be checked when the cutting devices or knives are cleaned or replaced ready for the next run?
- What areas of the machine require cleaning at the end of the run?

Completion of records

- What production records need to be kept or written up?

- What information should be included in this reporting procedure?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none">• Flat-bed die or forme cutting, embossing
Shapes	<ul style="list-style-type: none">• Simple or single shapes
Flat-bed cutting units	<ul style="list-style-type: none">• A range of machines with dies or cutting and manual, semi-automated fully automated or computerised process control
In-line processes	<ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none">• Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly produce either a flat-bed die cut or embossed product with different types and sizes of substrate and design of finished patterns according to job specifications and within the production timeframe
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on EITHER flat-bed die cutting OR embossing. For either process produce TWO jobs with different types and sizes of substrate and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)
- ICPCF225B Set up machine for basic flat-bed die cutting or embossing

ICPCF227B**Set up machine for basic rotary die cutting or embossing****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for rotary die cutting or embossing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for basic rotary die cutting or embossing.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare job | 1.1 Job specifications are read and interpreted from job documentation or production control system
1.2 Set-up is carried out correctly in minimum time with minimum wastage
1.3 Availability of all job related components is checked |
| 2. Mount rotary cutting or embossing devices | 2.1 Appropriate cutting devices or dies are selected and secured to machine according to job specifications
2.2 Cutting devices or dies are registered and proofed
2.3 Cutting devices or dies are correctly mounted |
| 3. Set up reel system | 3.1 Unwind and rewind reels are set up and adjusted according to job specifications
3.2 Webbing procedures are carried out according to job specifications
3.3 Web control system is set up and adjusted according to job specifications
3.4 Reels are spliced / joined according to job specifications
3.5 Folder and sheeter are set up and adjusted according to job specifications |
| 4. Set up sheet system | 4.1 Feeder and delivery systems are set up and adjusted according to job specifications
4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications
4.3 Transfer systems are set up and adjusted according to job specifications
4.4 Substrate is removed from process according to job specifications |
| 5. Set up machine for basic rotary cutting | 5.1 Rotary cutting devices are set up and adjusted according to job specifications
5.2 Cutting pressures are set up and adjusted according to job specifications
5.3 Counter knives / anvils are set in correct position |

- 6. Set up in-line units for basic processes
 - 6.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications
 - 6.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards)

- 7. Conduct sample run
 - 7.1 Material to be used for sample is organised correctly
 - 7.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 7.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 7.4 Results are interpreted to determine adjustment requirements
 - 7.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when reading and interpreting job specifications and completing workplace documentation
- Planning and organising to ensure registration alignment of cutting devices or dies by correctly organising the materials to be used
- Teamwork by giving assistance with the setting up of in-line units
- Using technology by selecting appropriate cutting device or dies.
- Problem solving when checking the availability of all job related components

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning rotary die cutting or embossing would you expect to find in the job documentation or production control system?

Mounting and installing rotary cutting devices

- What needs to be checked when cutting devices are mounted on a cylinder?
- What needs to be checked when the cutting devices are attached to the machine?

Reel transportation system on web-fed machines

- What OHS concerns are there when setting up reel transportation systems?
- What adjustments to the unwind reel may be needed to suit various jobs?
- What are the important areas to be considered during webbing procedures?

Sheet transportation system on sheet-fed machines

- What OHS concerns are there when setting up sheet transportation systems?
- What are FOUR important areas to check with the feeder unit set up?

Reel delivery system on web-fed machines

- What important areas of the reel delivery system may need to be adjusted according to job specifications?
- What steps should be taken to ensure that the delivery system operates effectively?

Sheet delivery system on sheet-fed machines

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?
- What are FOUR ways in which the finished product can be secured for dispatch?

Setting up the machine for basic rotary die cutting or embossing

- What OHS factors must be considered when setting up cutting devices?
- How is the machine pressure determined?
- How are the machine cutting depths determined?

Basic in-line processes

- When would it be necessary to adjust in-line units?

Quality assurance

- What details of the completed sample should be examined to ensure conformance with the client's requirements?
- How should the cutting edges, counter knives (anvils) be stored to guard against damage and deterioration?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Rotary die and forme cutting, embossing
Shapes	<ul style="list-style-type: none"> • Simple or single shapes
Rotary cutting units	<ul style="list-style-type: none"> • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for basic rotary die cutting or embossing according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on EITHER rotary die cutting OR embossing. For either process set up TWO jobs changing the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF220B Produce basic converted or finished product

ICPCF228B**Produce basic rotary die cut or embossed product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce a basic product on a rotary die cutting or embossing machine.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to maintain the operation of machinery and the production process, to rectify minor problems and to shut down the equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Maintain operation of reel transportation system (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and rewind section are monitored and adjusted to ensure efficient continuous operation and to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from the process according to job specifications 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain operation of sheet transportation system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transportation system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to the process according to job specifications |
| 3. Maintain basic rotary die cutting or embossing process | <ul style="list-style-type: none"> 3.1 Cutting edges and knife condition are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of cutting devices and knife(s) is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- 4. Maintain production process
 - 4.1 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 4.4 Manual and / or automatic control is used according to job specifications
 - 4.5 Performance is monitored and verified using the process control system according to enterprise procedures
 - 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 4.9 Waste is sorted according to enterprise procedures
- 5. Identify and rectify problems and faults
 - 5.1 Problems in cutting (rotary) machine are identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 5.3 Cutting (rotary) machine operation is checked to ensure correct operation
 - 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations
- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 7. Clean rotary cutting machine at end of run
 - 7.1 Cutting devices and knife(s) are replaced or cleaned ready for next run
 - 7.2 Cutting devices and knife(s) are sharpened correctly
 - 7.3 Machine bed is cleaned ready for next run
 - 7.4 Cutting machine is disengaged and cleaned ready for next run
 - 7.5 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 7.6 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 7.7 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 7.8 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills to read and interpret job specifications and complete workplace documentation
- Planning and organising by following the correct shutdown sequence
- Teamwork by conducting the shutdown with fellow workers
- Using technology by adjusting machinery to improve performance
- Problem solving by monitoring and verifying performance using process control systems

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?

Maintenance of rotary cutting process

- What OHS factors must be considered when maintaining the cutting process?
- What are FOUR important points to monitor when maintaining the rotary cutting process?
- What are THREE sectors of the basic in-line printing / converting / binding / finishing process that may need to be monitored and adjusted to meet the approved standards?
- What production difficulties can be expected during production runs?

Cutting machine faults and problems

- What OHS factors must be considered when problem solving on the rotary machine cutting process?
- Explain the procedure for correcting THREE common machine faults.

Machine shutdown procedures

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked when cutting devices or knives are cleaned, stored or replaced ready for the next run?
- What areas of the machine require cleaning at the end of the run?

Quality assurance

- What quality aspects should be considered in a completed rotary cutting job?
- What production areas may have to be adjusted to meet client requirements?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none">• Rotary die and forme cutting, and embossing
Shapes	<ul style="list-style-type: none">• Simple or single shapes
Rotary cutting units	<ul style="list-style-type: none">• A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control
Substrate types	<ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
In-line processes	<ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate handling	<ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none">• Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce basic products that meet job specifications and production timeframes using rotary cutting or embossing equipment
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on EITHER rotary die cutting OR embossing. For either process produce TWO jobs with different types and sizes of substrate and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)
- ICPCF227B Set up machine for basic rotary die cutting or embossing

ICPCF231B**Unit Descriptor****Set up machine for basic flat-bed cutting**

This unit describes the performance outcomes, skills and knowledge required to set up minor flat-bed cutting processes, including kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing, round cornering.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a range of minor flat-bed cutting processes including kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing, round cornering.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---------------------------------------|---|
| 1. Prepare for job | 1.1 Job specifications are read and interpreted from job documentation or production control system
1.2 Set-up is carried out correctly in minimum time with minimum wastage
1.3 Availability of all job related components is checked |
| 2. Mount flat-bed cutting devices | 2.1 Cutting devices are correctly mounted
2.2 Cutting devices are registered and proofed
2.3 Appropriate cutting devices are selected and secured to machine according to job specifications |
| 3. Set up reel system (OR Element 4) | 3.1 Unwind and rewind reels are set up and adjusted according to job specifications
3.2 Webbing procedures are carried out according to enterprise procedures
3.3 Web control system is set up and adjusted according to job specifications
3.4 Reels are spliced / joined according to job specifications
3.5 Folder and sheeter are set up and adjusted according to job specifications |
| 4. Set up sheet system (OR Element 3) | 4.1 Feeder and delivery systems are set up and adjusted according to job specifications
4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications
4.3 Transfer systems are set up and adjusted according to job specifications
4.4 Substrate is removed from process according to job specifications |
| 5. Set up machine | 5.1 Flat-bed cutting devices are set up and adjusted according to job specifications
5.2 Cutting pressures are set up and adjusted according to job specifications
5.3 Machine lays are set to correct position for registration |

- 6. Assist in set up for other in-line processes
 - 6.1 Assistance is given in set up of in-line printing / converting / binding units. (NOTE: if entire set up is completed, refer to appropriate competency standards)
 - 6.2 Minor in-line printing processes (date stamping, numbering) are set up correctly (if relevant)

- 7. Conduct sample run
 - 7.1 Material to be used for sample is organised correctly
 - 7.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 7.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 7.4 Results are interpreted to determine adjustment requirements
 - 7.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills to read and interpret job specifications and to complete workplace documentation
- Planning and organising by setting up the machine for basic flat-bed cutting
- Teamwork by conducting the shutdown with fellow workers
- Using technology by setting up the sheet delivery system
- Problem solving by removing substrate from the process according to job specifications

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning flat-bed hole punching / indexing / creasing and scoring would you expect to find in the job documentation or production control system?

Mounting and installing flat-bed cutting devices

- What needs to be checked when cutting devices are mounted on a cylinder?
- What needs to be checked when the cutting devices are attached to the machine?

Reel transportation system on web-fed machines

- What OHS concerns are there when setting up reel transportation systems?
- What adjustments to the unwind reel may be needed to suit various jobs?
- What are the important areas to be considered during webbing procedures?

Sheet transportation system on sheet-fed machines

- What OHS concerns are there when setting up sheet transportation systems?
- What are FOUR important areas to check when the feeder unit is set up?

Reel delivery system on web-fed machines

- What important areas of the reel delivery system may need to be adjusted according to job specifications?
- What steps should be taken to ensure that the delivery system operates effectively?

Sheet delivery system on sheet-fed machines

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?
- What are FOUR ways in which the finished product can be secured for dispatch?

Setting machine for basic flat-bed cutting

- What OHS factors must be considered when setting up cutting devices?
- How is the machine pressure determined?
- How are the machine cutting depths determined?

Basic in-line processes

- When would it be necessary to adjust in-line units?

Quality assurance

- What details of the completed sample should be examined to ensure conformance to the client's requirements?
- How should the cutting tools and equipment be stored to guard against damage and deterioration?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Perforating, sprocket hole punching, slotting, sheeting, slitting, creasing, scoring
Flat-bed cutting units	<ul style="list-style-type: none"> • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as numbering, date coding. Where a major in-line process is defined as a separate competency (eg folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machinery for basic flat bed cutting according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on any THREE different processes. For each process set up TWO jobs changing the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF220B Produce basic converted or finished product.
- Since the component processes often occur as in-line processes they may also be assessed at the same time as virtually any printing, converting, binding and finishing or corrugating set up.

ICPCF232B**Produce basic flat-bed cut product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to undertake minor flat-bed cutting processes including kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing and round cornering.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to produce product involving a range of minor flat-bed cutting processes including kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing and round cornering.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain reel transportation system (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and rewind sections are monitored and adjusted to ensure efficient continuous operation to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from the process according to job specifications 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain sheet transportation system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to the process according to job specifications |
| 3. Maintain basic flat-bed cutting process | <ul style="list-style-type: none"> 3.1 Cutting edges and knife condition are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of cutting devices and knife(s) is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- 4. Maintain production process
 - 4.1 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 4.4 Manual and / or automatic control is used according to job specifications
 - 4.5 Performance is monitored and verified using the process control system according to enterprise procedures
 - 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 4.9 Waste is sorted according to enterprise procedures
- 5. Identify and rectify problems and faults
 - 5.1 Problems in flat-bed cutting machine operation are identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 5.3 Flat-bed cutting machine operation is checked to ensure correct operation
 - 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations
- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 7. Clean flat-bed cutting machine at end of run
 - 7.1 Cutting devices and knife(s) are cleaned or replaced ready for next run
 - 7.2 Cutting devices are sharpened
 - 7.3 Machine bed is cleaned ready for next run
 - 7.4 Cutting units are disengaged and cleaned ready for next run
 - 7.5 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 7.6 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 7.7 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 7.8 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills by monitoring and verifying performance using process control systems
- Planning and organising by monitoring and adjusting transportation systems
- Teamwork by conducting the shutdown with fellow workers
- Using technology by adjusting machinery to improve performance
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?

Maintenance of cutting process (flat-bed and in-line)

- What OHS factors must be considered when maintaining the cutting process?
- What indicators demand the replacement of a knife?
- How is cutting pressure adjusted?

Cutting machine faults and problems

- What OHS factors must be considered when problem solving on the machine maintaining the cutting process?
- What needs to be checked when packing cutting devices?
- Explain the procedure for correcting THREE common machine faults.

Machine shutdown procedures

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked during the machine shutdown procedure?
- What needs to be checked when the cutting devices or knives are cleaned or replaced ready for the next run?
- What areas of the machine require cleaning at the end of the run?

Completion of records

- What production records need to be kept or written up?

- What information should be included in this reporting procedure?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Flat-bed hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, pin perforating, indexing, round cornering
Shapes	<ul style="list-style-type: none"> • Simple or single shapes
Flatbed cutting units	<ul style="list-style-type: none"> • A range of machines with dies, cutting formes or drills and manual, semi-automated fully automated or computerised process control
In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce products involving a range of minor flat-bed cutting processes including: kiss cutting, hole punching, hole drilling, slotting, slitting, sheeting, creasing, scoring, and pin perforating, indexing and round cornering according to job specifications and production timeframes
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on THREE different processes. For each process produce TWO jobs with different types and sizes of substrate and design of finished patterns, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic).
- Since the component processes often occur as in-line processes they may also be assessed at the same time as virtually any printing, converting, binding and finishing or corrugating process.

ICPCF235B**Unit Descriptor****Set up machine for basic rotary cutting**

This unit describes the performance outcomes, skills and knowledge required to set up minor rotary cutting processes.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a range of minor rotary cutting processes including kiss cutting, perforating, sprocket hole punching, slotting, sheeting, slitting, creasing, scoring.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Mount rotary cutting devices to cylinders | <ul style="list-style-type: none"> 2.1 Cutting devices are correctly mounted 2.2 Cutting devices are registered and proofed 2.3 Appropriate cutting devices are selected and secured to machine according to job specifications |
| 3. Set up reel system (or Element 4) | <ul style="list-style-type: none"> 3.1 Unwind and rewind reels are set up and adjusted according to job specifications 3.2 Webbing procedures are carried out according to enterprise procedures 3.3 Web control system is set up and adjusted according to job specifications 3.4 Reels are spliced / joined according to job specifications 3.5 Folder and sheeter are set up and adjusted according to job specifications |
| 4. Set up sheet system (or Element 3) | <ul style="list-style-type: none"> 4.1 Feeder and delivery systems are set up and adjusted according to job specifications 4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications 4.3 Transfer systems are set up and adjusted according to job specifications 4.4 Substrate is removed from process according to job specifications |
| 5. Set up machine | <ul style="list-style-type: none"> 5.1 Rotary cutting devices are set up and adjusted according to job specifications 5.2 Cutting pressures are set up and adjusted according to job specifications 5.3 Counter knives / anvils are set in correct position |

- 6. Assist in set up for other in-line processes
 - 6.1 Assistance is given in set up of in-line printing / converting / binding units. (NOTE: if entire set up is completed, refer to appropriate competency standards)
 - 6.2 Minor in-line printing processes (date stamping, numbering) are set up correctly (if relevant)

- 7. Conduct sample run
 - 7.1 Material to be used for sample is organised correctly
 - 7.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 7.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 7.4 Results are interpreted to determine adjustment requirements
 - 7.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills by monitoring and verifying performance using process control systems
- Planning and organising a sample run
- Teamwork by conducting the shutdown with fellow workers
- Using technology by setting up the machine for basic rotary cutting
- Problem solving by removing substrate from the process according to job specifications

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning rotary hole punching / indexing / creasing and scoring would you expect to find in the job documentation or production control system?

Mounting and installing rotary cutting devices

- What needs to be checked when cutting devices are mounted on a cylinder?
- What needs to be checked when the cutting devices are attached to the machine?

Reel transportation system on web-fed machines

- What OHS concerns are there when setting up reel transportation systems?
- What adjustments to the unwind reel may be needed to suit various jobs?
- What are the important areas to be considered during webbing procedures?

Sheet transportation system on sheet-fed machines

- What OHS concerns are there when setting up sheet transportation systems?
- What are FOUR important areas to check when the feeder unit is set up?

Reel delivery system on web-fed machines

- What important areas of the reel delivery system may need to be adjusted according to job specifications?
- What steps should be taken to ensure that the delivery system operates effectively?

Sheet delivery system on sheet-fed machines

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?
- What are FOUR ways in which the finished product can be secured for dispatch?

Setting machine for basic rotary cutting

- What OHS factors must be considered when setting up cutting devices?
- How is the machine pressure determined?
- How are the machine cutting depths determined?

Basic in-line processes

- When would it be necessary to adjust in-line units?

Quality assurance

- What details of the completed sample should be examined to ensure conformance to the client's requirements?
- How should the cutting tools and equipment be stored to guard against damage and deterioration?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Rotary kiss cutting, perforating, sprocket hole punching, slotting, sheeting, slitting, creasing, scoring
Rotary cutting units	<ul style="list-style-type: none"> • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as numbering, date coding. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machinery for basic rotary cutting according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on any THREE different processes. For each process set up TWO jobs changing the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF220B Produce basic converted or finished product.
- Since the component processes often occur as in-line processes they may also be assessed at the same time as virtually any printing, converting, binding and finishing or corrugating set up.

ICPCF236B**Produce basic rotary cut product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce basic rotary cut product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain reel transportation system (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and rewind section are monitored and adjusted to ensure efficient continuous operation and maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from the process according to job specifications 1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain sheet transportation system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to process according to job specifications |
| 3. Maintain basic rotary cutting process | <ul style="list-style-type: none"> 3.1 Cutting edges and knife condition are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of cutting devices and knife(s) are monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- 4. Maintain production process
 - 4.1 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 4.4 Manual and / or automatic control is used according to job specifications
 - 4.5 Performance is monitored and verified using the process control system according to enterprise procedures
 - 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 4.9 Waste is sorted according to enterprise procedures
- 5. Identify and rectify problems and faults
 - 5.1 Problem in rotary cutting machine operation is identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 5.3 Rotary cutting machine operation is checked to ensure correct operation
 - 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations
- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 7. Clean rotary cutting machine at end of run
 - 7.1 Cutting devices and knife(s) are cleaned or replaced ready for next run
 - 7.2 Cutting devices are sharpened
 - 7.3 Machine bed is cleaned ready for next run
 - 7.4 Cutting units are disengaged and cleaned ready for next run
 - 7.5 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 7.6 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 7.7 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 7.8 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills by monitoring and verifying performance using process control systems
- Planning and organising when monitoring and adjusting transportation systems
- Teamwork by conducting the shutdown with fellow workers
- Using technology by adjusting machinery to improve performance
- Identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What needs to be checked when substrate is removed from the machine?

Maintenance of rotary cutting process

- What OHS factors must be considered when maintaining the cutting process?
- What are FOUR important points to monitor when maintaining the rotary cutting process?
- What are THREE sectors of the basic in-line printing / converting / binding / finishing process that may need to be monitored and adjusted to meet the approved standards?
- What production difficulties can be expected during production runs?

Cutting machine faults and problems

- What OHS factors must be considered when problem solving on the rotary machine cutting process?
- Explain the procedure for correcting THREE common machine faults.

Machine shutdown procedures

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked when cutting devices or knives are cleaned, stored or replaced ready for the next run?
- What areas of the machine require cleaning at the end of the run?

Completion of records

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?

Quality assurance

- What quality aspects should be considered in a completed rotary cutting job?
- What production areas may have to be adjusted to meet client requirements?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Rotary die and forme cutting, kiss cutting, perforating, sprocket hole punching, slotting, slitting, sheeting, creasing, scoring and embossing
Shapes	<ul style="list-style-type: none"> • Simple or single shapes
Rotary cutting units	<ul style="list-style-type: none"> • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control
Substrates	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems

- Degree of autonomy
- Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce rotary cut products that meet the job specifications, production time frames and quality requirements
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on any THREE different processes. For each process produce TWO jobs with different types and sizes of substrate and design of finished patterns, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic).
- Since the component processes often occur as in-line processes they may also be assessed at the same time as virtually any printing, converting, binding and finishing or corrugating process.

ICPCF241B**Set up machine for basic single or continuous folding****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for basic folding.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for basic folding.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up reel system (OR Element 3) | <ul style="list-style-type: none"> 2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to job specifications 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications |
| 3. Set up sheet (OR Element 2) | <ul style="list-style-type: none"> 3.1 Feeder and delivery systems are set up and adjusted according to job specifications 3.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications 3.3 Transfer systems are set up and adjusted according to job specifications 3.4 Sheet transfer and control system is set up and adjusted according to job specifications |
| 4. Set up machine for basic single or continuous folding | <ul style="list-style-type: none"> 4.1 Folding units are set up and adjusted according to job specifications 4.2 Folding rollers / belts / rails are set up and adjusted according to job specifications |
| 5. Set up in-line units for basic processes | <ul style="list-style-type: none"> 5.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards) |

- 6. Conduct sample run
 - 6.1 Material to be used for sample is organised correctly
 - 6.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 6.3 Sample is visually inspected to determine adjustment requirements
 - 6.4 Results are interpreted to determine adjustment requirements
 - 6.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when assisting with the set up of in-line units with other people, and reading and interpreting job specifications
- Planning and organising when visually assessing the sample to determine adjustment requirements
- Teamwork by conducting the shutdown with fellow workers
- Using technology by setting up sheet delivery system on sheet-fed machine
- Identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning folding requirements would you expect to find in the job documentation or production control system?

Reel transportation systems on web-fed machine

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?

Sheet transportation and delivery systems on sheet-fed machine

- What OHS factors must be considered when setting folder transportation and delivery systems?
- What areas of the sheet-fed transportation system should be monitored to ensure trouble-free operation?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What are FOUR ways that folded sheets can be secured for dispatch?

Setting up machine for basic folding (single / continuous)

- What OHS factors must be considered when setting up and / or adjusting the folding unit?
- What can cause scratching / scuffing of substrate during transportation?
- What determines the speed of the machine?
- What problems can be expected if the machine is running too fast?
- How can roller pressures be checked for correctness?
- What needs to be adjusted if the sheet is out-of-square?
- What are FOUR possible reasons for the sheet being out-of-square?
- What can be adjusted to ensure that the sheets are not smudging / "scuffing"?
- What needs to be adjusted if the sheet will not leave the folding unit?

Basic in-line processes

- What OHS factors must be considered when adjusting machine units?
- What steps should be taken to ensure correct alignment of in-line processes / units?
- What adjustments are made to keep units correctly positioned?

Quality assurance

- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if job is out-of-square?
- What communication action should be instigated if ink is too wet for production?
- What communication action should be instigated if the job does not coincide with the sample?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Folding process	<ul style="list-style-type: none">• Single, parallel or continuous folding
Folding process	<ul style="list-style-type: none">• A range of machines with manual, semi-automated, fully automated or computerised process control
In-line processes	<ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none">• Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for basic folding according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up TWO jobs (if possible using different sizes and weights of substrate) EITHER with a single fold to run continuously OR a single quire fold on a sheet gather / stitch / fold / trim machine OR an automatic web-fed machine to achieve a single fold according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF220B Produce basic converted or finished product.

Depending on the configuration of equipment and types of jobs, the following units may also be assessed at the same time:

- ICPCF231B Set up machine for basic flat-bed cutting
- ICPCF235B Set up machine for basic rotary cutting
- ICPCF261B Set up machine for basic adhesive, mechanical or thermal fastening
- ICPCF320B Produce complex converted or finished product
- ICPCF361B Set up machine for complex adhesive, mechanical or sewn fastening.

ICPCF242B

Produce basic single or continuous folded product

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to produce basic folded product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT

PERFORMANCE CRITERIA

- | | |
|--|---|
| 1. Maintain reel transportation system (OR Element 2) | 1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation
1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation
1.3 Substrate is added to the process according to job specifications |
| 2. Maintain sheet transportation system (OR Element 1) | 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine
2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation
2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation
2.4 Substrate is added to the process according to job specifications |

- 3. Maintain production process
 - 3.1 Registration and squareness of fold are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 3.2 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 3.3 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 3.4 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 3.5 Manual and / or automatic control is used according to job specifications
 - 3.6 Performance is monitored and verified using the process control system according to enterprise procedures
 - 3.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 3.8 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 3.9 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 3.10 Waste is sorted according to enterprise procedures
- 4. Identify and rectify problems and faults
 - 4.1 Problems in folding (single / continuous) machine operation are identified and reported according to enterprise procedures
 - 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 4.3 Folding (single / continuous) machine operation is checked to ensure correct operation
 - 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 4.5 Repair / adjustment is verified prior to resumption of operations
- 5. Conduct shutdown of production process
 - 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 6. Clean folding (single / continuous) machine at end of run
 - 6.1 Folding units are disengaged and cleaned ready for next run
 - 6.2 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 6.3 Reel feed and transportation systems are disengaged and cleaned ready for next run
 - 6.4 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when monitoring and verifying performance using process control systems
- Planning and organising when monitoring and adjusting transportation systems
- Teamwork when conducting the shutdown with fellow workers
- Using technology by adjusting machinery to improve performance
- Identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel transportation systems on web-fed machines

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?

Sheet transportation and delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What needs to be checked when substrate is removed from the machine?

Maintaining basic folding processes

- What OHS factors must be considered when using the folding machine?
- What are THREE areas to continuously observe to ensure the smooth trouble-free operation of the machine?
- What areas of the in-line process should be monitored to assure the quality of the product?

Faults and minor problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- What are TWO causes of out-of-square folding and explain how each may be corrected?
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if job is out-of-square?
- What communication action should be instigated if ink is too wet for production?
- What communication action should be instigated if the job does not coincide with the sample?
- What part(s) of the machine should be adjusted if the sheet is creasing?

Machine shutdown and cleaning

- What OHS factors must be considered when cleaning the machine?
- What important tasks must be performed to correctly shut down the machine?
- How should the finished work be prepared for dispatch?
- What areas of the machine need regular cleaning?

- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What quality aspects should be considered in a completed folded job?
- In what way might production need to be altered to meet client requirements?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Folding process	<ul style="list-style-type: none">• Single, parallel or continuous folding
Folding units	<ul style="list-style-type: none">• A range of machines with manual, semi-automated, fully automated or computerised process control
In-line process	<ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none">• Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a single or continuous folded product that meets the job specifications, production timeframes and quality requirements
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Produce TWO jobs (if possible using different sizes and weights of substrate) EITHER with a single fold to run continuously OR a single quire fold on a sheet gather / stitch / fold / trim machine OR an automatic web-fed machine to achieve a single fold, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)
- ICPCF241B Set up machine for basic single or continuous folding

ICPCF243B**Set up machine for basic collating or inserting (sheet / section)****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for basic collating, gathering or inserting of sheets or sections.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for basic collating, gathering or inserting of sheets or sections and is appropriate for binding and finishing operations, mail houses and newspapers

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up sheet / section system | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are set up and adjusted according to job specifications 2.2 Double / misfeed detectors are set up according to job specifications 2.3 Sheet / section pick-up, transfer and transportation system is set up and adjusted according to job specifications 2.4 Transfer systems are set up and adjusted according to job specifications |
| 3. Set up machine and conduct sample run | <ul style="list-style-type: none"> 3.1 Collating / inserting system is set up and adjusted according to job specifications 3.2 Material to be used for sample is organised correctly 3.3 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures |
| 4. Organise sample inspection and / or testing | <ul style="list-style-type: none"> 4.1 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 4.2 Results are interpreted to determine adjustment requirements 4.3 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when monitoring and verifying performance using process control systems and reading and interpreting job specifications
- Planning and organising when setting up the sheet / section delivery system according to job specifications
- Teamwork when conducting the shutdown with fellow workers
- Using technology by using the double / misfeed sheet calliper system
- Identifying problems and faults and developing solutions, for example interpreting the results of tests and determining adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What important information concerning collating will be included in the job documentation or production control system?

Transport and delivery systems

- What OHS factors need to be considered when setting up sheet / section transportation and delivery systems?
- List FOUR important factors to consider when setting up the feeder.
- Explain the setting up of the double / misfeed sheet calliper system.
- What should be considered to ensure smooth transportation and delivery of the sheets or sections through the machine?
- Name the different types of sheet / section delivery systems.

Paper sizes and weights

- What is the largest and smallest sheet or section size that can be run through this machine?
- Which areas of the machine should be adjusted to allow for 42 gsm stock?

Machine operation and maintenance

- What are the major OHS factors to consider when running this machine?
- What factors govern the speed at which the machine can operate?
- What would indicate the machine was in need of lubrication?

Quality assurance

- What OHS factors need to be considered before readjusting the machine?
- What would constitute an acceptable collating result?
- What would cause the creasing of sheets in the machine delivery?
- How should the machine be adjusted to alleviate "bruising" of NCR paper?
- Under what circumstances would the machine need to be adjusted?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?

- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Collating / inserting process	<ul style="list-style-type: none"> • Collating / inserting of sheets, book sections or other products of identical or varied form, weight, shape
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Large or small sheet / sections
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for basic collating or inserting according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up a collating or inserting machine for basic collating or inserting for TWO different jobs (if possible ONE sheet and ONE section) involving at LEAST FOUR or FIVE products, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic).

Depending on the configuration of equipment and types of jobs, the following units may also be assessed at the same time:

- ICPCF223B Set up machine for cutting (trimming)
- ICPCF261B Set up machine for basic adhesive, mechanical or thermal fastening
- ICPCF320B Produce complex converted or finished product
- ICPCF361B Set up machine for complex adhesive, mechanical or sewn fastening.

ICPCF244B**Produce basic collated or inserted (sheet / section) product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce a basic collated or inserted sheet or section product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | | | |
|----|--|-----|---|
| 1. | Maintain operation of sheet / section transportation system on machine | 1.1 | Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine |
| | | 1.2 | Sheet / section pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation |
| | | 1.3 | Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation |
| | | 1.4 | Substrate is added to process according to job specifications |
| 2. | Maintain production process | 2.1 | Collating or inserting process is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 2.2 | Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule |
| | | 2.3 | Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures |
| | | 2.4 | Manual and / or automatic control is used according to job specifications |
| | | 2.5 | Performance is monitored and verified using the process control system according to enterprise procedures |
| | | 2.6 | Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention |
| | | 2.7 | Process adjustments to eliminate problems are reported according to enterprise procedures |
| | | 2.8 | Waste is sorted according to enterprise procedures |
| | | 2.9 | Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample |

- 3. Identify and rectify problems and faults
 - 3.1 Problem in collating or inserting (sheet / section) machine is identified and reported according to enterprise procedures
 - 3.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 3.3 Collating or inserting (sheet / section) machine operation is checked to ensure correct operation
 - 3.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 3.5 Repair / adjustment is verified prior to resumption of operations

- 4. Conduct shutdown of production process
 - 4.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 4.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 4.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 5. Clean (sheet / section) machine at end of run
 - 5.1 Collating or insert machine is cleaned ready for next run
 - 5.2 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 5.3 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 5.4 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when monitoring and verifying performance using process control systems and reading and interpreting job specifications
- Planning and organising when setting up the sheet / section delivery system according to job specifications
- Teamwork when conducting the shutdown with fellow workers
- Using technology by adjusting machinery to improve performance
- Identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Machine operation

- What OHS factors should be considered when operating the machine?
- What factors govern the speed at which the machine will operate?

Problems and fault correction

- What OHS factors should be considered before readjusting the machine?
- What method of correction is needed to prevent double sheet feeds?
- Under what circumstances would the machine need to be adjusted?

Machine shutdown and cleaning

- What needs to be checked when shutting down the machine correctly?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What would constitute an acceptable collating result?
- What are FOUR items that must be checked against client's sample?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Collating process | <ul style="list-style-type: none">• Collating / inserting of sheets or book sections of identical form, weight, shape |
| Collating units | <ul style="list-style-type: none">• A range of suction and friction feed machines with manual, semi-automated, fully automated or computerised process control |
| In-line process | <ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Substrate types | <ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal |
| Substrate handling | <ul style="list-style-type: none">• Large or small sheet / section handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a collated product that meets job specifications, production timeframes and quality standards
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Use a collating machine for basic collating (gathering and / or inserting) for TWO different jobs (if possible ONE sheet and ONE section) involving at LEAST FOUR or FIVE products, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must take place in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF242B Produce basic single or continuous folded product
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)

ICPCF245B**Set up and produce hand-collated or -inserted product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to hand collate or insert product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to produce hand collated or inserted product.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Collating / inserting system is set up according to job specifications |
| 2. Conduct sample run | <ul style="list-style-type: none"> 2.1 Material to be used for sample is organised correctly 2.2 Collating or inserting system is operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures |
| 3. Organise sample inspection and / or testing | <ul style="list-style-type: none"> 3.1 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 3.2 Results are interpreted to determine adjustment requirements 3.3 Adjustment changes are carried out according to product specifications |
| 4. Maintain production process | <ul style="list-style-type: none"> 4.1 Hand collating process is monitored and adjusted to ensure quality of product meets the standard of the approved sample 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 4.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.5 Process adjustments to eliminate problems are reported according to enterprise procedures |

- 5. Clean work area at end of run
 - 5.1 Collating area is cleaned ready for next run
 - 5.2 Waste is sorted according to enterprise procedures
 - 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 5.4 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when adjusting production in consultation with clients and reading and interpreting job specifications from job documentation or production control systems
- Planning and organising sample inspection and / or testing
- Teamwork when maintaining the production process in association with fellow workers
- Using technology by readjusting the collating system
- Problem solving by anticipating production difficulties through preventive action

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What important information concerning this task would be found on the production control job ticket?
- What steps should be taken to ensure that the important features of the production control system are followed?
- What production records need to be kept or written up?
- What information should be included in this reporting procedure and why?

Sheet handling

- What ergonomic and OHS factors should be considered when setting up the job to facilitate ease of operation?
- What facilities are available to assist with the picking up of product by hand?
- What precautions should be taken when handling NCR paper?
- What methods can be used to separate finished sets of product?
- What can assist the opening of sections to be inserted?
- What adjustment should be made to the set up to facilitate a two- or three-person operation?

Sequencing

- What printed images on sections ensure correct sequencing?
- How do these images assure the correct sequence of sections?

Quality assurance

- What steps should be taken to ensure that important features of the production control system are followed?
- What areas of the finished product should be inspected?
- What steps should be taken if the test sample is incorrect?

Housekeeping

- How should remaining sheets (overs) be processed at the completion of the job?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|-------------------------------|--|
| Collating / inserting process | <ul style="list-style-type: none"> • Manual collating / inserting of sheets, book sections or other products of identical or varied form, weight, shape |
| Substrate types | <ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal |
| Substrate handling | <ul style="list-style-type: none"> • Large or small sheet / sections |
| Degree of autonomy | <ul style="list-style-type: none"> • Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up and produce hand collated and inserted product according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Set up and collate TWO different jobs (at least FIVE products, and if possible ONE sheet job and ONE section job) by hand according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF261B**Set up machine for basic adhesive, mechanical or thermal fastening****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for basic adhesive, mechanical or thermal fastening. Some equipment may also involve cutting, trimming, folding and / or gathering (collating) which may be assessed at the same time.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for basic adhesive, mechanical or thermal fastening.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up reel system (OR Element 3) | <ul style="list-style-type: none"> 2.1 Unwind and delivery reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to job specifications 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications |
| 3. Set up sheet / section system (OR Element 2) | <ul style="list-style-type: none"> 3.1 Feeder and delivery systems are set up and adjusted according to job specifications 3.2 Sheet / section pick-up and transportation system is set up and adjusted according to job specifications 3.3 Transfer systems are set up and adjusted according to job specifications 3.4 Substrate is removed from the process according to job specifications 3.5 Sheet / section transfer and control system is set up and adjusted according to job specifications |
| 4. Set up equipment and in-line units | <ul style="list-style-type: none"> 4.1 Fastening system is set up and adjusted according to job specifications 4.2 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications 4.3 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards) |

- 5. Conduct sample run
 - 5.1 Raw material to be used for sample is organised correctly
 - 5.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 5.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 5.4 Results are interpreted to determine adjustment requirements
 - 5.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when organising a laboratory test if required and reading and interpreting job specifications
- Planning and organising when conducting a sample run
- Teamwork by giving assistance with setting up in-line units
- Using technology by setting up and adjusting the fastening system according to job specifications
- Problem-solving by interpreting sample results to determine adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning binding requirements would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What elements must be considered when planning a binding sample?

Reel transport and delivery systems

- What OHS areas must be addressed when setting up these areas of the machine?
- What are THREE webbing procedures commonly used in the transportation area?
- What are THREE areas to consider when setting up the web control system?
- What are THREE problem areas likely to be encountered when setting up the sheeter?

Sheet / section transportation and delivery systems

- What OHS factors must be considered when setting up the delivery systems?
- What special delivery problems are associated with adhesive machines?
- In what way are these problems overcome?
- What needs to be checked when using the delivery systems present on the various machines?
- What are FOUR ways in which the completed work can be secured for dispatch?

Machine set up

- What OHS areas must be addressed when setting up the machine?
- What OHS safeguards are necessary with hot melt adhesives?
- What determines the correct binding technique for a job?
- Explain the methods of adhesive metering present on the machine.
- What care should be taken to ensure a neat and clean adhesive binding job?
- What parts of the wire stitcher would need to be adjusted to process books of different thicknesses?
- What determines the position of the wire stitches on the book?
- What is the difference between a staple and a wire stitch?
- How is the appropriate wire calliper for a particular job determined?

Basic in-line processes

- What OHS factors must be addressed when setting up these areas of the machine?
- What in-line units are available for these binding processes?

Quality assurance

- What OHS factors should be considered before readjusting the machine?
- Under what circumstances would the machine need to be adjusted?
- What quality aspects should be considered in the completed binding job?
- What steps should be taken to ensure that important features of the production control system are addressed?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Fastening processes	<ul style="list-style-type: none"> • Adhesive fastening such as cold and hot melt gluing, taping • Mechanical fastening such as riveting, string and wire stitching, and wire binding • Thermal fastening such as high frequency and head welding
Fastening units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
Complexity	<ul style="list-style-type: none"> • Basic refers to simple hand-fed or single-head adhesive and thermal machines, single-head mechanical machines
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal

- | | |
|--------------------|--|
| Substrate handling | <ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machine for basic fastening according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up machine on TWO occasions for adhesive OR mechanical OR thermal fastening, using different weights and sizes of substrate according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF220B Produce basic converted or finished product.
- Depending on the configuration of equipment and types of jobs, virtually any other converting, binding and finishing set up unit can be assessed at the same time.

ICPCF262B**Produce basic adhesive, mechanical or thermal fastened product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce basic adhesive, mechanical or thermal fastened product. Some equipment may also involve cutting, trimming, folding and / or gathering (collating) which may be assessed at the same time.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Maintain reel transportation system (OR Element 2) | 1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation
1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation
1.3 Substrate is added to process according to job specifications |
| 2. Maintain sheet transportation system (OR Element 1) | 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine
2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operations
2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation
2.4 Substrate is added to process according to job specifications |
| 3. Maintain basic adhesive / mechanical / thermal fastening process | 3.1 Registration of fastening is monitored and adjusted to ensure quality of product meets the standard of the approved sample
3.2 Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample OR
3.3 Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample OR
3.4 Power current and dwell time is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- 4. Maintain production process
 - 4.1 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 4.4 Manual and / or automatic control is used according to job specifications
 - 4.5 Performance is monitored and verified using the process control system according to enterprise procedures
 - 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.8 Waste is sorted according to enterprise procedures
- 5. Identify and rectify problems and faults
 - 5.1 Problems in adhesive / mechanical / thermal fastening machine are identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 5.3 Adhesive / mechanical / thermal fastening machine operation is checked to ensure correct operation
 - 5.4 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 5.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.6 Repair / adjustment is verified prior to resumption of operations
- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 7. Clean machine at end of run
 - 7.1 Mechanical fastening unit is disengaged and cleaned ready for next run
 - 7.2 Thermal fastening unit is disengaged and cleaned ready for next run
 - 7.3 Glue system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 7.4 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 7.5 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 7.6 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 7.7 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when monitoring and verifying performance using process controls
- Planning and organising when following the correct shutdown sequence
- Teamwork when conducting shutdown with fellow workers
- Using technology by adjusting machinery to improve performance
- Identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel transportation system on web-fed machine

- What OHS factors must be considered when operating web machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?

Sheet transportation and delivery system

- What OHS factors must be considered when operating sheet-fed transportation and delivery systems?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What areas of the delivery system should be observed to maintain tension?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine

Maintaining basic adhesive / mechanical / thermal fastening process

- What OHS factors must be considered when using hot melt adhesive?
- What safety clothing is available for use when operating adhesive binders?
- What OHS factors should be considered before readjusting the machine?
- What areas of the in-line process should be monitored to assure the quality of the product?
- Name TWO sectors to observe to ensure that the production process is trouble-free and continuous.

Operating problems and minor fault correction

- When would the machine need to be adjusted?
- For an adhesive binder how is adhesive application adjusted?
- For a wire stitcher how can the wire be straightened in the wire feed?
- For a high frequency welder what are TWO possible reasons for the welding being unsuccessful?

Shutdown and cleaning procedures

- What OHS factors must be considered when shutting down and cleaning the machine?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What quality aspects should be considered in a completed adhesive bound job?
- What quality aspects should be considered in a completed high frequency welded job?
- What quality aspects should be considered in a completed wire stitched job?
- In what way might production need to be altered to meet client requirements?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Fastening process	<ul style="list-style-type: none"> • Adhesive fastening such as cold and hot melt gluing, taping • Mechanical fastening such as riveting, string and wire stitching, and wire binding • Thermal fastening such as high frequency and heat welding
Fastening units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
Complexity	<ul style="list-style-type: none"> • Basic refers to simple hand-fed or single-head adhesive and thermal machines, single-head mechanical machines
In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate delivery	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a basic fastened product that meets job specifications, production timeframes and quality standards
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- On TWO occasions produce adhesive OR mechanical OR thermal fastened products, using different weights and sizes of substrate, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must take place in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)
- ICPCF261B Set up machine for basic adhesive, mechanical or thermal fastening

ICPCF263B**Unit Descriptor****Employability Skills****Application of the Unit****Unit Sector****Set up and produce hand-fastened product**

This unit describes the performance outcomes, skills and knowledge required to set up and produce hand-fastened product.

This unit contains employability skills.

This unit requires the individual to set up and produce hand-fastened product.

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Fastening system is set up and adjusted according to job specifications |
| 2. Conduct sample run | <ul style="list-style-type: none"> 2.1 Raw material to be used for sample is organised correctly 2.2 Equipment is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures 2.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 2.4 Results are interpreted to determine adjustment requirements 2.5 Adjustment changes are carried out according to product and equipment specifications |
| 3. Maintain basic fastening (adhesive / mechanical) process (OR Element 4) | <ul style="list-style-type: none"> 3.1 Registration of fastening is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.2 Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample OR 3.3 Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| 4. Maintain hand sewing process (OR Element 3) | <ul style="list-style-type: none"> 4.1 Appropriate sewing supports are selected and spaced according to job specifications 4.2 Consistent thread tension is maintained during sewing 4.3 Sections are aligned at the head 4.4 Swelling is monitored and controlled |

- 5. Maintain production process
 - 5.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 5.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 5.3 Performance is monitored and verified using the process control system according to enterprise procedures
 - 5.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 5.5 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 5.6 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 5.7 Waste is sorted according to enterprise procedures
- 6. Identify and rectify problems and faults
 - 6.1 Problems in fastening (adhesive / mechanical) equipment are identified and reported according to enterprise procedures
 - 6.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 6.3 Fastening (adhesive / mechanical) equipment operation is checked to ensure correct operation
- 7. Clean fastening equipment
 - 7.1 Mechanical fastening unit is disengaged and cleaned ready for next run OR
 - 7.2 Glue system is washed up ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 7.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 7.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 7.5 Repair / adjustment is verified prior to resumption of operations
 - 7.6 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when reporting faulty equipment performance and completing production records and other documentation
- Planning and organising by selecting and spacing appropriate sewing support
- Teamwork when maintaining the production process in association with other workers
- Using technology by maintaining the fastening process
- Identifying problems and developing solutions when disposing of liquid waste according to regulatory requirements and enterprise procedures

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning binding would you expect to find in the job documentation or production control system?

Equipment set up, operation and adjustment

- What OHS factors need to be addressed when adjusting machinery?
- Under what circumstances would a machine need to be adjusted?
- What determines the correct binding technique for a job?
- What safety measures should be taken when setting up and operating this equipment?
- What parts of the wire stitcher would need to be adjusted to process books of different thicknesses?
- What determines the position of the wire stitches on the book?
- What is the difference between a staple and a wire stitch?
- How is the appropriate wire calliper for a particular job determined?
- What care should be taken to ensure a neat and clean adhesive binding job?
- Explain where the sewing stages should be positioned on the book.
- Explain the term "Kettle stitch"
- List THREE common sewing problems likely to be met when sewing a multi-section book.
- Explain the purpose of sewing frames.
- What can be done to ensure that hand sewing remains firmly together?

Lubrication and cleaning of equipment

- What problems are associated with oiling a wire stitcher?
- What problems can occur if equipment is not properly cleaned and maintained?

Maintenance of production flow

- What steps can be taken to ensure the smooth passage of work through the factory?

Problems associated with binding processes

- How can production problems occur during processing?
- What measures can be used to prevent production interruptions?

Quality assurance

- What would constitute an acceptable binding result?
- What can be expected if wire stitches are not in the right position?
- What would cause a book to be "stab" stitched?
- What special problems may be encountered with "stab" stitching?
- What determines if a job is to be "saddle" stitched or "flat" / "side" stitched?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Fastening processes	<ul style="list-style-type: none"> • Adhesive fastening such as cold and hot melt gluing, taping • Mechanical fastening such as wire stitching, velo, comb and wire binding • Hand section sewing
Fastening units	<ul style="list-style-type: none"> • A range of manually operated equipment
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Manual handling of large or small sheets
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up and produce hand-fastened products according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated in TWO areas of: adhesive / thermal (drawn on cover or heated binding tape application), mechanical (wire stitcher or heavy duty stapler including saddle and flat stitching), hand sewing (single and multi-section books)
- For each area set up equipment and produce TWO basic hand-fastened products of different thickness and spine length to demonstrate equipment adjustment, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product.
- Depending on the configuration of equipment and types of jobs, virtually any other converting, binding and finishing set up unit can be assessed at the same time.

ICPCF281B**Unit Descriptor****Set up machine for basic laminating**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for a range of laminating processes including laminating reel to reel, sheet to reel and reel to sheet.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for a range of laminating processes.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--------------------------------------|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up reel system | <ul style="list-style-type: none"> 2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to job specifications 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications 2.5 Sheeter is set up and adjusted according to job specifications |
| 3. Set up sheet system (IF RELEVANT) | <ul style="list-style-type: none"> 3.1 Feeder is set up and adjusted according to job specifications 3.2 Sheet / section pick-up and transportation system is set up and adjusted according to job specifications, if relevant 3.3 Transfer systems are set up and adjusted according to job specifications, if relevant |
| 4. Set up laminating machine | <ul style="list-style-type: none"> 4.1 Application system cylinder is set up and adjusted according to job specifications 4.2 Adhesive application system is set up and adjusted according to job specifications 4.3 Binding pressures are set and adjusted according to job specifications 4.4 Drying system is set up and adjusted according to job specifications |
| 5. Set up in-line units | <ul style="list-style-type: none"> 5.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards) |

- 6. Conduct sample run
 - 6.1 Raw material to be used for sample is organised correctly
 - 6.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 6.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 6.4 Results are interpreted to determine adjustment requirements
 - 6.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when organising laboratory testing of samples and completing production records and other documentation
- Planning and organising a sample run
- Teamwork when assisting with the set up of major in-line units
- Using technology to adjust the sheeter as required by the job specifications
- Identifying problems and developing solutions when interpreting test results and determining adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning laminating requirements would you expect to find in the job documentation or production control system?

Reel transport and delivery systems

- What OHS areas must be addressed when setting up these areas of the machine?
- Explain THREE problem areas likely to be encountered setting up the sheeter.
- What problems can be encountered when fitting supply films to mandrels?

Setting up the machine

- What factors determine the setting of the binding pressures?
- Explain three problems that can be encountered when the machine is in operation.

Basic in-line processes

- What OHS areas must be addressed when setting up these areas of the machine?
- What in-line units are available for the laminating process?

Quality assurance

- What OHS factors are to be considered before readjusting the machine?
- What quality aspects should be considered in a completed laminating job?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|---|
| Adhesives | <ul style="list-style-type: none">• Range of single or two-component adhesives used in laminating |
| Laminating process | <ul style="list-style-type: none">• Moisture, chemical and thermal cured, and extrusion process |
| In-line processes | <ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Substrate types | <ul style="list-style-type: none">• Range of absorbent and non-absorbent, transparent and non-transparent substrates within the major categories of paper, board, corrugated board, plastics and metals |
| Sheet size | <ul style="list-style-type: none">• Where sheets are being laminated, this unit only applies when sheets are at least A4 |
| Substrate handling | <ul style="list-style-type: none">• Wide and narrow reel and large and small sheet handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for a range of laminating processes according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up laminating machine to complete TWO or more ply laminating jobs on different substrates and of different sizes (if possible including one in-line process) in minimum time, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product
- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU207B Prepare machine for operation (basic)

ICPCF282B**Unit Descriptor****Employability Skills****Application of the Unit****Produce basic laminated product**

This unit describes the performance outcomes, skills and knowledge required to produce basic laminated product.

This unit contains employability skills.

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain reel transportation system | <ul style="list-style-type: none"> 1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to the process according to job specifications 1.4 Reel rewind section is monitored and adjusted to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.5 Substrate is removed from process according to job specifications 1.6 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain basic laminating process | <ul style="list-style-type: none"> 2.1 Registration of laminating is monitored and adjusted to ensure quality of product meets the standard of the approved sample 2.2 Pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample 2.3 Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| 3. Maintain production process | <ul style="list-style-type: none"> 3.1 Basic in-line printing / coating / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and / or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Waste is sorted according to enterprise procedures |

- 4. Identify and rectify problems and faults
 - 4.1 Problems in laminating machine are identified and reported according to enterprise procedures
 - 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 4.3 Laminating machine operation is checked to ensure correct operation
 - 4.4 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.5 Faulty performance of equipment is identified and reported according to enterprise procedures

- 5. Conduct shutdown of production process
 - 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations

- 6. Clean laminating machine at end of run
 - 6.1 Laminating machine is disengaged and cleaned ready for next run
 - 6.2 Adhesive system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 6.3 In-line printing / coating / converting / binding / finishing units are cleaned ready for next run
 - 6.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when monitoring and verifying performance using process control systems
- Planning and organising the correct shutdown sequence
- Teamwork when conducting shutdown with fellow workers
- Using technology to adjusting machinery to improve performance
- Identifying problems and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel transportation and delivery systems

- What OHS factors must be considered when operating web machine transport and delivery systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What needs to be checked when substrate is removed from the machine?

Maintaining laminating production processes

- What OHS factors must be considered when maintaining the laminating and in-line processes?
- How is registration of laminating assured?
- What areas of the in-line processes should be monitored to ensure a quality product?

Operating problems and minor fault correction

- What are TWO laminating problems that may occur during the operation of the machine?
- What adjustments or correction procedures may need to be made to ensure accurate operation of the process?

Shutdown and cleaning procedures

- What important tasks must be performed to correctly shut down the machine?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What quality aspects should be considered in a completed laminated job?
- In what way might production need to be altered to meet client requirements?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Adhesives | <ul style="list-style-type: none">• Range of single or two component adhesives used in basic laminating |
| Laminating process | <ul style="list-style-type: none">• Moisture, chemical and thermal cured, and extrusion process |
| Laminating units | <ul style="list-style-type: none">• Range of manual, semi-automated, fully automated and computerised process control |
| In-line process | <ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Substrate types | <ul style="list-style-type: none">• Range of absorbent and non-absorbent, transparent and non-transparent substrates within the major categories of paper, plastics and metals |
| Substrate delivery | <ul style="list-style-type: none">• Wide and narrow reel handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a basic laminated product that meets job specifications, production timeframes and quality standards
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Operate laminating machine to complete TWO two-ply jobs on different substrates and of different sizes (if possible including one in-line process) according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must take place in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF281B Set up machine for basic laminating
- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU208B Operate and monitor machines (basic)

ICPCF294B**Set up profile cutting for envelope manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to correctly set up profile cutting equipment.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to correctly set up profile cutting equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---------------------------|--|
| 1. Set up profile cutting | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The correct materials are checked and available for the job 1.3 Adhesives are appropriate for the substrate, the application process and the machine 1.4 Work area is made safe and ready for production according to safety requirements 1.5 Profile cutting unit including profile knives, and where appropriate, fly knives, is set up according to job specifications 1.6 Blades are checked for sharpness and fitted as necessary, with units calibrated according to job specifications 1.7 Settings are checked against job specifications before production is commenced 1.8 Machine is stepped to ensure the profile is in the correct position and paper tension is accurate 1.9 The envelope shape and size conforms to job specifications and cuts are clean and meet quality requirements |
| 2. Confirm the quality | <ul style="list-style-type: none"> 2.1 A sample from the machine is selected and checked to ensure it conforms to quality standards 2.2 Adjustments are made when the standards are not met 2.3 Samples are continuously monitored for defects and defects are removed 2.4 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 2.5 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 2.6 The locations of all emergency shutdown buttons and triggers are known |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery
- Communication skills when checking and confirming job specifications
- Planning and organising setting up the machine before producing a sample
- Teamwork when maintaining the production process by working in association with others
- Using technology such as profile cutting units during the manufacture of envelopes
- Problem solving when monitoring quality standards and making adjustments to machine settings

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with profile cutting, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Job specifications | • Job sheets, batch processing orders, job specs |
| Stepped | • Inched, jogged, moved slowly through the process |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up profile cutting units for manufacturing the following types of envelope: banker, open-sided wallet, open-ended pocket and automatic filling, according to job specifications and within the production timeframe
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance in setting cutting profiles
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to profile cutting machinery used for cutting envelope profiles

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF297B**Unit Descriptor****Clean sack and bag machines**

This unit describes the performance outcomes, skills and knowledge required to clean and check a sack and bag machine with minimum downtime.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to clean sack and bag machines with minimum downtime.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|-------------------------|--|
| 1. Prepare for cleaning | <ul style="list-style-type: none"> 1.1 Machinery is safely switched off before cleaning is started 1.2 The cleaning equipment and materials most suitable for the machine are selected |
| 2. Commence cleaning | <ul style="list-style-type: none"> 2.1 Vacuum systems are checked for wear, opened and cleaned with compressed air and suction replaced if necessary 2.2 Rollers and drums are checked for wear and cleaned 2.3 Jaws and grippers are cleaned and checked for wear 2.4 Glue units are checked for wear and cleaned and excess glue and build-up removed from glue nipples 2.5 Glue applicators are cleaned and checked for wear 2.6 Hot melt residues are removed and glue pot is cleaned 2.7 Base and underneath of machine is cleaned of print ink and glue residue 2.8 Entire machine is blown down top to bottom and all grease and oil is removed from components, housings and the floor 2.9 Cleaning methods which are safe, avoid harm to the environment and which follow the manufacturer's instructions are used |
| 3. Complete cleaning | <ul style="list-style-type: none"> 3.1 Used cleaning agents and waste materials are disposed of safely 3.2 The machine is checked to ensure that it is safe to operate, when cleaning is finished, and all machine guarding is replaced or repositioned in safe working order 3.3 Obvious faults and wear are documented and reported |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by reporting and documenting obvious faults and wear
- Planning and organising by selecting cleaning equipment and materials most suitable for the machine
- Teamwork when maintaining the production process by working in association with others
- Using technology when checking vacuum systems for wear, cleaning them with compressed air and replacing suction if necessary
- Problem solving when disposing safely of used cleaning agents and waste materials

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with sack or bag manufacturing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures
- OHS procedures for using cleaning fluids

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Rollers	<ul style="list-style-type: none"> • Draw rollers, path rollers, top and bottom transfer rollers, web rollers, side seam rollers, rollers on handle machines
Correct materials	<ul style="list-style-type: none"> • Glues, papers, coated and uncoated, pre-printed
Job specifications	<ul style="list-style-type: none"> • Job sheets, batch processing orders, job specs
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Clean and check a sack and bag machine with minimum downtime according to job specifications and within the production timeframe
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance in cleaning sack and bag machines
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- A sack or bag making machine

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF298B**Unit Descriptor****Run and monitor sack and bag machines**

This unit describes the performance outcomes, skills and knowledge required to run and monitor sack and bag machines.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to run and monitor sack and bag machines with a prescribed range of functions involving known routines and procedures with some accountability for the quality of outcomes.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|-------------------------------|--|
| 1. Monitor production process | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The supply of materials throughout the run is maintained 1.3 Paper tension is monitored on an ongoing basis 1.4 Machine is run at optimum speed for maintaining quality outputs |
| 2. Maintain quality | <ul style="list-style-type: none"> 2.1 The locations of all emergency shutdown buttons and triggers are known 2.2 A sample from the machine is selected and checked to ensure it matches the required standards 2.3 Adjustments are made when the standards are not met 2.4 Each in-line process is monitored and minor adjustments are made during production, if required 2.5 Samples are continuously monitored for defects and defects are removed 2.6 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 2.7 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards |
| 3. Identify problems | <ul style="list-style-type: none"> 3.1 Faults which affect the quality of the sacks or bags are identified and rectified 3.2 Problems that reduce the rate of output are identified and fixed 3.3 Faults that affect the efficient operation of equipment are identified and resolved |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when checking and confirming all details required for the job against job specifications
- Planning and organising by monitoring wastage, keeping it to a minimum and correctly disposing of it
- Teamwork when maintaining the production process by working in association with others
- Using technology by monitoring and running sack and bag machines
- Problem solving when selecting and checking a sample from the machine to ensure it conforms to the required quality standards

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with sack or bag manufacturing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Job specifications

- Job sheets, batch processing orders, job specs

Substrate types

- Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Maintain the throughput of sack or bag machines consistently over a period of time
- Demonstrate all safety devices on the machine
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Machinery used to produce sacks and bags

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF3100B**Run and monitor in-line tube making machine for sack or bag manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to run and monitor in-line tube making machines for the manufacture of sacks or bags.

Employability Skills

This unit contains employability skills.

Prerequisite Unit(s)

ICPCF298B Run and monitor sack and bag machines

Application of the Unit

This unit requires the individual to run and monitor in-line tube making machines for the manufacture of sacks or bags.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|------------------------------|---|
| 1. Monitor throughput | <ul style="list-style-type: none"> 1.1 Machine is stepped to ensure the scores and folds are in the correct position and paper tension is correct 1.2 Guide positions are monitored and adjusted if necessary to ensure adhesive is applied evenly and in the correct position 1.3 Multi-walls adhere correctly and without creasing 1.4 Paper moisture is monitored and correct moisture levels are maintained 1.5 Perforation occurs to the right depth and in the correct place 1.6 Creasing units and folding units work in the correct location 1.7 Folds and guillotine cuts are correctly placed 1.8 Glues dry at correct rates for in-line processes 1.9 All units run at the speed required by enterprise quality standards |
| 2. Confirm quality of output | <ul style="list-style-type: none"> 2.1 A sample from the machine is selected and checked to ensure it conforms to the required quality standards 2.2 Adjustments are made when the standards are not met 2.3 Each in-line process is monitored and minor adjustments are made during production, if required 2.4 Samples are continuously monitored for defects and defects are removed 2.5 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 2.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards |
| 3. Confirm quality of output | <ul style="list-style-type: none"> 3.1 Faults which affect the quality of the sacks or bags are identified and rectified 3.2 Problems that reduce the rate of output are identified and fixed 3.3 Faults that affect the efficient operation of equipment are identified and resolved |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when checking and confirming all details required for the job against job specifications
- Planning and organising by monitoring wastage, keeping it to a minimum and correctly disposing of it
- Teamwork when maintaining the production process by working in association with others
- Using technology by monitoring and running in-line tube making machines
- Problem solving when selecting and checking a sample from the machine to ensure it conforms to the required quality standards

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with in-line tubing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Correct materials	• Glues, papers, coated and uncoated, pre-printed
Job specifications	• Job sheets, batch processing orders, job specs
Stepped	• Inched, jogged, moved slowly through the process
Substrate types	• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Run and monitor in-line tube making machines for the manufacture of sacks or bags
- Run and monitor in-line tube making machines for the manufacture of sacks or bags in the workplace
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to in-line scoring, folding, and gluing machinery used in the manufacture of sacks and bags

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF3101B**Run and monitor in-line bottom making machine for sack or bag manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to operate an in-line bottom making machine for the manufacture of sacks or bags with minimum downtime.

Employability Skills

This unit contains employability skills.

Prerequisite Unit(s)

ICPCF298B Run and monitor sack and bag machines

Application of the Unit

This unit requires the individual to operate an in-line bottom making machine for the manufacture of sacks or bags. The individual will anticipate, identify and rectify production problems with minimum downtime.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|-------------------------------|--|
| 1. Monitor production process | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The supply of materials throughout the run is maintained 1.3 Paper tension is monitored on an ongoing basis 1.4 Machine is run at optimum speed for maintaining quality outputs 1.5 Machine is adjusted to maintain quality of outputs |
| 2. Monitor production | <ul style="list-style-type: none"> 2.1 Correct perforation alignment is maintained 2.2 Pick-up rollers are working correctly and pressure and timing are maintained 2.3 Glue patch applicator or glue impression roller remains clear and dispenses the required amount of glue 2.4 Doctor blades and hot melt unit are operating correctly 2.5 Timing between all units is maintained or adjusted to avoid production problems 2.6 Overall production is monitored and adjustments are made to avoid production problems or improve production speeds |
| 3. Maintain quality | <ul style="list-style-type: none"> 3.1 Correct procedures for the removal of waste are followed according to enterprise procedures 3.2 Samples are continuously monitored for defects and defects are removed 3.3 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 3.4 The locations of all emergency shutdown buttons and triggers are known |

- | | | | |
|----|-------------------------------|-----|---|
| 4. | Identify problems and rectify | 4.1 | Faults which affect the quality of the sacks or bags are identified and rectified |
| | | 4.2 | Problems that reduce the rate of output are identified and fixed |
| | | 4.3 | Faults that affect the efficient operation of equipment are identified and resolved |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when checking and confirming all details required for the job against job specifications
- Planning and organising by maintaining the supply of materials throughout the run
- Teamwork when maintaining the production process by working in association with others
- Using technology by operating an in-line bottom making machine for the manufacture of sacks or bags
- Problem solving by identifying and fixing problems that reduce the rate of output

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with setting up in-line scoring, folding and gluing machines, what causes faults and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise production standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Correct materials | • Glues, papers, coated and uncoated, pre-printed |
| Job specifications | • Job sheets, batch processing orders, job specs |
| Stepped | • Inched, jogged, moved slowly through the process |

Substrate types

- Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly operate an in-line bottom making machine for the manufacture of sacks or bags. The individual will anticipate, identify and rectify production problems with minimum downtime
- Operate an in-line bottom making machine for the manufacture of sacks or bags according to job specifications. The individual will anticipate, identify and rectify production problems with minimum downtime to maintain production speeds

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to in-line bottom making machinery used in the manufacture of sack and bags

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF3102B**Set up and monitor in-line scoring, folding and gluing machine for sack or bag manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up in-line scoring, folding and gluing machines used in the manufacture of sacks or bags.

Employability Skills

This unit contains employability skills.

Prerequisite Unit(s)

ICPCF298B Run and monitor sack and bag machines

Application of the Unit

This unit requires the individual to set up in-line scoring, folding and gluing machines used in the manufacture of sacks or bags.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------------|---|
| 1. Set up and adjust units | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The correct materials and tools are checked and available for the job 1.3 Adhesives are appropriate for the substrate, the application process and the machine 1.4 Work area is safe and ready for production according to safety requirements 1.5 Blades are sharp and fitted as necessary and units are calibrated according to job specifications 1.6 Settings are checked against job specifications before production is commenced 1.7 Machine is stepped to ensure the scores and folds are in the correct position and paper tension is corrected / adjusted |
| 2. Monitor throughput | <ul style="list-style-type: none"> 2.1 Once settings are fixed the unit is run at the speed required to produce a quality product 2.2 Machine is monitored to ensure the scores and folds are in the correct position and paper tension is correct 2.3 Guide positions are monitored to ensure adhesive is applied evenly and in the correct position 2.4 Paper moisture is monitored and correct moisture levels are maintained 2.5 Folds and guillotine cuts are correctly placed 2.6 Glues dry at correct rates for substrate and adequate fibre tears are visible |

3. Confirm quality of output
- 3.1 A sample from the machine is selected and checked to ensure it conforms to the required quality standards
 - 3.2 Adjustments are made when the standards are not met
 - 3.3 Each in-line process is monitored and minor adjustments are made during production, as necessary
 - 3.4 Samples are continuously monitored for defects and defects are removed
 - 3.5 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved
 - 3.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards
 - 3.7 The locations of all emergency shutdown buttons and triggers are known

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when checking and confirming all details required for the job against job specifications
- Planning and organising by ensuring that the work area is safe and ready for production according to safety requirements
- Teamwork when maintaining the production process by working in association with others
- Using technology by using an in-line scoring, folding and gluing machine
- Problem solving by stepping the machine to ensure the scores and folds are in the correct position and paper tension is correct

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with in-line scoring, folding and gluing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- Correct materials
- Glues, papers, coated and uncoated, pre-printed

- | | |
|--------------------|--|
| Job specifications | • Job sheets, batch processing orders, job specs |
| Stepped | • Inched, jogged, moved slowly through the process |
| Substrate types | • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up and monitor in-line scoring, folding and gluing machines used in the manufacture of sacks or bags according to job specifications and within the production timeframe
- Set up and monitor in-line scoring, folding and gluing machines used in the manufacture of sacks or bags
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to in-line scoring, folding, and gluing machinery used in the manufacture of sacks and bags

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF3103B

Run and monitor envelope manufacturing machines

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to run and monitor envelope manufacturing machines.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and run envelope manufacturing machines involving known routines and procedures with some accountability for the quality of outcomes.

Unit Sector

Converting, Binding and Finishing

ELEMENT

PERFORMANCE CRITERIA

- | | |
|-------------------------------|--|
| 1. Monitor production process | 1.1 All details required for the job are checked and confirmed against job specifications |
| | 1.2 The supply of materials throughout the run is maintained |
| | 1.3 Machine is run at optimum speed for maintaining quality outputs |
| | 1.4 Samples from the machine are selected and checked to ensure they conform with the required quality standards |
| | 1.5 Machines are adjusted to maintain quality of outputs |
| 2. Maintain quality | 2.1 Correct procedures for the removal of waste are followed according to enterprise procedures |
| | 2.2 Samples are continuously monitored for defects and defects are removed |
| | 2.3 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved |
| | 2.4 The locations of all emergency shutdown buttons and triggers are known |
| 3. Identify problems | 3.1 Faults which affect the quality of the envelopes are identified and rectified |
| | 3.2 Problems that reduce the rate of output are identified and fixed |
| | 3.3 Faults that affect the efficient operation of equipment are identified and resolved |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when checking and confirming all details required for the job against job specifications
- Planning and organising by correctly disposing of waste during the production process
- Teamwork when maintaining the production process by working in association with others
- Using technology by running and monitoring envelope making machines
- Problem solving by selecting and checking a sample from the machine to ensure it conforms to the required quality standards

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with envelope manufacturing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures
- Fault finding and correction documentation

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Correct materials	<ul style="list-style-type: none">• Glues, papers, coated and uncoated, pre-printed
Job specifications	<ul style="list-style-type: none">• Job sheets, batch processing orders, job specs
Settings	<ul style="list-style-type: none">• Paper tension, paper thickness, coated and non-coated materials, glue drying times, wastage allowance, substrate

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Maintain the throughput of envelope manufacturing machines consistently over a period of time
- Demonstrate all safety devices on the machine
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Machinery used to produce envelopes

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF3105B**Unit Descriptor****Produce single-faced web**

This unit describes the performance outcomes, skills and knowledge required to produce a single-faced web for corrugated board manufacture.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to produce single-faced web for corrugated board manufacture, inspect the quality, maintain production, identify and rectify problems and correctly shut down the machine.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Inspect and adjust quality | <ul style="list-style-type: none"> 1.1 Inspection and / or testing of sample is organised 1.2 Sample is visually inspected and / or tested according to enterprise procedures 1.3 Results are interpreted to determine adjustment requirements 1.4 Adjustment changes are carried out according to product and machine specifications |
| 2. Maintain operation of reel transportation system | <ul style="list-style-type: none"> 2.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 2.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web and efficient operation 2.3 Substrate is added to the process according to job specifications |
| 3. Maintain single facing process | <ul style="list-style-type: none"> 3.1 Starch delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.2 Heat delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.3 Steam delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.4 Corrugating roll and pressure rolls are monitored and adjusted to suit corrugating process and according to job specifications 3.5 Speed of machine is optimised according to running conditions 3.6 Appropriate quantity of paper is run with a minimum of wastage |
| 4. Maintain in-line process(es) | <ul style="list-style-type: none"> 4.1 Coating units are monitored and adjusted to suit corrugating process and according to job specifications 4.2 Waxing units are monitored and adjusted to suit corrugating process and according to job specifications 4.3 Slitters are monitored and adjusted according to job specifications 4.4 Cut-off knife is monitored and adjusted according to job specifications |

- | | |
|---|--|
| 5. Synchronise machine operation | <ul style="list-style-type: none"> 5.1 Machine down-time is minimised during flute, grade or deckle changes 5.2 Quality of board is maintained according to enterprise procedures or client acceptance standard 5.3 Machine speed is optimised and waste minimised |
| 6. Maintain production process | <ul style="list-style-type: none"> 6.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 6.3 Manual and / or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process control system according to enterprise procedures 6.5 Starch performance is monitored and adjusted throughout production run 6.6 Quality checks are carried out on a regular basis and adjustments made as necessary |
| 7. Identify and rectify problems | <ul style="list-style-type: none"> 7.1 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 7.2 Process adjustments to eliminate problems are reported according to enterprise procedures 7.3 Faulty performance of equipment is identified and reported according to enterprise procedures 7.4 Waste is sorted according to enterprise procedures 7.5 Problems in corrugator operation are identified and reported according to enterprise procedures 7.6 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.7 Corrugator operation is checked to ensure correct operation |
| 8. Conduct shutdown of production process | <ul style="list-style-type: none"> 8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 8.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 All product is removed from operating area 8.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.6 Repair / adjustment is verified prior to resumption of operations |

- 9. Clean and wash up
 - 9.1 In-line wax and coating units are cleaned ready for next run
 - 9.2 Starch delivery system is washed up ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 9.3 Reel feed and transportation systems are disengaged and cleaned ready for next run
 - 9.4 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when checking and confirming all details required for the job against job specifications
- Planning and organising by shutting down equipment in the correct sequence
- Teamwork when maintaining the production process by working in association with others
- Using technology by operating and maintaining equipment
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS risks

- What are the significant risks that are posed to workers in this activity?
- What measures are employed to prevent injury and / or illness in the case of the above identified risks?

Support equipment / systems

- What are the principle support systems on line to the corrugating machine?
- How can they be effectively controlled and monitored, while operating the corrugator?

Troubleshooting

- What sections of the single facer have the higher potential for operational problems during the run?
- Which product faults are commonly found to arise during production runs and how can they be corrected?

Maintenance of machine settings

- How are the settings monitored and adjustment made during the run, for the following factors: in-feed, web alignment control, pre-conditioners, adhesive application, corrugation, single facer, steam delivery, heating of web and speed?

Visual and manual product inspection / testing

- Which product factors can be monitored visually / manually by staff operating end stages of the corrugator machine?
- How can these staff bring about adjustments in response to problems found?

Wash-up and shutdown techniques

- What are the functions that must be attended to for the wash-up and shutdown of the single facer for an idle period of at least two days?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?

- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machines	<ul style="list-style-type: none"> • Range of corrugating machines with manual, semi-automated and fully automated process control systems
In-line processes	<ul style="list-style-type: none"> • Range of wax and coating systems operations, slitters and cutters. Note that slitting and cutting may be separately assessable as flat-bed or rotary cutting
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of board or paper
Substrate handling	<ul style="list-style-type: none"> • Wide reel handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce single-faced web for corrugated board manufacture, inspect the quality, maintain production, identify and rectify problems and correctly shut down machine
- Perform at least TWO runs on the single facer to produce TWO different types / classes of product according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment
- In-line corrugating equipment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. This unit may be assessed at the same time as:

- ICPCF2104B Set up single-faced web
- ICPCF220B Produce basic converted or finished product
- ICPCF231B Set up machine for basic flat-bed cutting
- ICPCF235B Set up machine for basic rotary cutting
- ICPCF281B Set up machine for basic laminating
- ICPSU201B Prepare, load and unload reels and cores on and off machine

ICPCF3106B

Set up machine for basic carton folding and gluing

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to set up a machine for basic carton folding and gluing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for basic carton folding and gluing.

Unit Sector

Converting, Binding and Finishing

ELEMENT

PERFORMANCE CRITERIA

- | | |
|--|--|
| 1. Set up carton blank transportation system | 1.1 Feeder is set up and adjusted according to job specifications
1.2 Carton blank pick-up and transportation system is set up and adjusted according to job specifications
1.3 Transfer systems are set up and adjusted according to job specifications |
| 2. Set up carton delivery system | 2.1 Delivery is set up and adjusted according to job specifications
2.2 Substrate is removed from process according to job specifications |
| 3. Set up machine for basic folding and gluing (single / continuous) | 3.1 Folding units are set up and adjusted according to job specifications
3.2 Folding rollers / belts / rails are set up and adjusted according to job specifications
3.3 Gluing system is set up and adjusted according to job specifications using either glue wheel or one glue head |
| 4. Conduct sample run | 4.1 Material to be used for sample is organised correctly
4.2 Machine is set up and operated according to OHS requirements, manufacturer's specifications and enterprise procedures to produce a specified sample
4.3 Sample is visually inspected and / or tested for accuracy of folds, fibre tear, opening force, fluff and glue placement according to enterprise procedures |
| 5. Readjust settings | 5.1 Results are interpreted to determine adjustment requirements
5.2 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when reading and interpreting job requirements from job documentation or production control system
- Planning and organising by setting up the carton blank transportation system before setting up for folding and gluing
- Teamwork when maintaining the production process by working in association with others
- Using technology by using carton folding and gluing machines
- Problem solving by interpreting results to determine adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning folding requirements would you expect to find in the job documentation or production control system?

Sheet transportation and delivery systems on sheet-fed machine

- What OHS factors must be considered when setting up folder transportation and delivery systems?
- What areas of the sheet-fed transportation system should be monitored to ensure trouble-free operation?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What are FOUR ways that folded sheets can be secured for dispatch?

Setting machine for basic folding (single / continuous)

- What OHS factors must be considered when setting up and / or adjusting the folding unit?
- What can cause scratching / scuffing of substrate during transportation?
- What determines the speed of the machine?
- What problems can be expected if the machine is running too fast?
- How can roller pressures be checked for correctness?
- What needs to be adjusted if the sheet is out-of-square?
- What are FOUR possible reasons for the sheet being out-of-square?
- What can be adjusted to ensure that the sheets are not smudging / "scuffing"?
- What needs to be adjusted if the sheet will not leave the folding unit?

Basic in-line processes

- What OHS factors must be considered when adjusting the inkjet printer?
- What steps should be taken to ensure correct alignment of the inkjet printer?
- What adjustments are made to keep units correctly positioned?

Machine set up for gluing

- What OHS areas must be addressed when setting up these areas of the machine?

- What OHS safeguards are necessary with hot melt adhesives?
- What determines the correct binding technique for a job?
- Explain the methods of adhesive metering present on the machine.
- What care should be taken to ensure a neat and clean adhesive binding job?

Quality assurance

- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if the job is out-of-square?
- What communication action should be instigated if ink is too wet for production?
- What communication action should be instigated if the job does not conform to QA checking?

Information sources

- What machine manuals and safety documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machinery	• A Royal 40, a Bobst Media, a Bobst Domino
Folding and gluing	• Straight-line folding and gluing of cartons
Carton board	• Different weights and sizes of carton board
Degree of autonomy	• Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up machine to produce a range of simple straight line folded and glued cartons as required in normal production on, for example, a Royal 40, a Bobst Media or a Bobst Domino
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Set up machine on at least FOUR occasions for basic straight line folding and gluing of cartons with different weights and sizes of carton board according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- For example a Royal 40, a Bobst Media or a Bobst Domino

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF3107B**Unit Descriptor****Produce double-faced web**

This unit describes the performance outcomes, skills and knowledge required to produce a double-faced web for corrugated board manufacture.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to perform runs on the double backer machine, maintain production, identify and rectify problems and faults, and correctly shut down the machine.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|---|
| 1. Inspect and adjust quality | <ul style="list-style-type: none"> 1.1 Inspection and / or testing of sample is organised 1.2 Sample is visually inspected and / or tested according to enterprise procedures 1.3 Results are interpreted to determine adjustment requirements 1.4 Adjustment changes are carried out according to product and machine specifications |
| 2. Maintain operation of reel transportation system | <ul style="list-style-type: none"> 2.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 2.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web and efficient operation 2.3 Substrate is added to the process according to job specifications |
| 3. Maintain double facing process | <ul style="list-style-type: none"> 3.1 Starch delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.2 Pressure delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.3 Heat delivery system is monitored and adjusted to suit corrugating process and according to job specifications 3.4 Speed of machine is optimised according to running conditions 3.5 Appropriate quantity of paper is run |
| 4. Maintain in-line process(es) | <ul style="list-style-type: none"> 4.1 Waxing units are monitored and adjusted to suit corrugating process and according to job specifications 4.2 Coating units are monitored and adjusted to suit corrugating process and according to job specifications 4.3 Tape dispensing units are monitored and adjusted to suit corrugating process and according to job specifications 4.4 Slitters are monitored and adjusted according to job specifications 4.5 Cut-off knife is monitored and adjusted according to job specifications |

- | | |
|---|--|
| 5. Synchronise machine operation | <ul style="list-style-type: none"> 5.1 Machine down-time is minimised during flute, grade or deckle changes 5.2 Quality of board is maintained according to enterprise procedures or client acceptance standard 5.3 Machine speed is optimised and waste minimised |
| 6. Maintain production process | <ul style="list-style-type: none"> 6.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 6.3 Manual and / or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process control system according to enterprise procedures 6.5 Starch performance is monitored and adjusted throughout production run 6.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 6.7 Process adjustments to eliminate problems are reported according to enterprise procedures 6.8 Faulty performance of equipment is identified and reported according to enterprise procedures 6.9 Waste is sorted according to enterprise procedures 6.10 Quality checks of product are undertaken on a regular basis and adjustments made as required |
| 7. Identify and rectify problems | <ul style="list-style-type: none"> 7.1 Problems in corrugator operation are identified and reported according to enterprise procedures 7.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.3 Corrugator operation is checked to ensure correct operation |
| 8. Conduct shutdown of production process | <ul style="list-style-type: none"> 8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 8.3 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 All product is removed from operating area 8.5 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.6 Repair / adjustment is verified prior to resumption of operations |

- 9. Clean and wash up corrugator at end of run
 - 9.1 In-line wax, coating and tape dispensing units are cleaned ready for next run
 - 9.2 Starch delivery system is washed up ready for next run, and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 9.3 Reel feed and transportation systems are disengaged and cleaned ready for next run
 - 9.4 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when reading and interpreting job requirements from job documentation or production control system
- Planning and organising by shutting down equipment in the correct sequence
- Teamwork when maintaining production processes in association with colleagues
- Using technology by producing double-faced web on the corrugator
- Problem solving by selecting and checking a sample from the machine to ensure it conforms to the required quality standards

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS risks

- What are the significant risks that are posed to workers in this activity?
- What measures are employed to prevent injury and / or illness in the case of the above identified risks?

Support equipment / systems

- What are the principal support systems on line to the corrugating machine?
- How can they be effectively controlled and monitored while operating the corrugator?

Troubleshooting

- What sections of the double backer have the higher potential for operational problems during the run?
- Which product faults are commonly found to arise during production runs and how can they be corrected?

Maintenance of machine settings

- How are the settings monitored and adjustment made during the run, for the following factors: in-feed, web alignment control, adhesive application, double backer, steam delivery, heating of web and speed?

Visual and manual product inspection / testing

- Which product factors can be monitored visually / manually by staff operating end stages of the corrugator machine?
- How can these staff bring about adjustments in response to problems found?

Wash-up and shutdown techniques

- What are the functions that must be attended to for the wash-up and shutdown of the double backer for an idle period of at least two days?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?

- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machines	<ul style="list-style-type: none"> • Range of corrugating machines with manual, semi-automated and fully automated process control systems
In-line processes	<ul style="list-style-type: none"> • Range of wax and coating systems operations, slitters and cutters. Note that slitting and cutting may be separately assessable as flat-bed or rotary cutting
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of board or paper
Substrate handling	<ul style="list-style-type: none"> • Wide reel handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Perform runs on the double backer machine, maintain production, identify and rectify problems and faults, and correctly shut down the machine
- Perform at least TWO runs on the double backer to produce TWO different types / classes of product, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment
- In-line double backer corrugating equipment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF2106B Set up double-faced web
- ICPCF220B Produce basic converted or finished product
- ICPCF231B Set up machine for basic flat-bed cutting
- ICPCF235B Set up machine for basic rotary cutting
- ICPSU201B Prepare, load and unload reels and cores on and off machine

ICPCF3109B**Unit Descriptor****Employability Skills****Application of the Unit****Produce complex folded and glued cartons**

This unit describes the performance outcomes, skills and knowledge required to produce complex folded and glued products.

This unit contains employability skills.

This unit requires the individual to produce complex folded and glued products and to correctly shut down and clean machinery when the job is completed.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Maintain operation of carton blank system | <ul style="list-style-type: none"> 1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Carton blank pick-up and transportation system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous carton blank handling and efficient operation 1.4 Substrate is added to process according to job specifications 1.5 Delivery is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain complex carton folding and gluing process | <ul style="list-style-type: none"> 2.1 Registration and accuracy of folds are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 2.2 Gluing process is monitored and adjusted to ensure accuracy of glue application and strength of adhesion to conform to quality standards |
| 3. Maintain operation of production process | <ul style="list-style-type: none"> 3.1 Production process is operated in association with fellow workers and according to enterprise specifications and planned daily schedule 3.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 3.3 Performance is monitored and verified using the process control system according to enterprise procedures 3.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.5 Process adjustments to eliminate problems are reported according to enterprise procedures 3.6 Faulty performance of equipment is identified and reported according to enterprise procedures 3.7 Waste is sorted according to enterprise procedures |

- 4. Identify and rectify problems
 - 4.1 Problems in folding and gluing machine operation are identified and reported according to enterprise requirements
 - 4.2 Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level
 - 4.3 Complex folding / gluing machine operation is checked to ensure correct operation
- 5. Conduct shutdown of production process
 - 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 5.3 Waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 5.4 Machine faults requiring repair are identified and reported to designated person, according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations
- 6. Clean folding / gluing machine at end of run
 - 6.1 Folding unit is cleaned ready for next run
 - 6.2 Gluing unit is disengaged and cleaned ready for next run
 - 6.3 Transport and delivery systems are cleaned ready for next run
 - 6.4 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when reading and interpreting job requirements from job documentation or production control system
- Planning and organising by setting up the carton blank transportation system before the carton delivery system
- Teamwork when maintaining production processes in association with colleagues
- Using technology by using carton folding and gluing machines
- Problem solving by interpreting results to determine adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Carton blank transportation and delivery systems

- What OHS factors must be considered when setting and / or operating folder / gluer transport and delivery systems?
- What areas of the feeder should be monitored to ensure trouble-free operation?
- What parts of the pick-up system have to be adjusted to ensure accurate and continuous feeding?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when carton blanks are removed from the machine?

Complex folding and gluing processes

- List FOUR areas to continually observe to ensure the smooth trouble-free operation of the machine.
- What areas of the gluing unit should be continuously monitored?

Problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- Name SIX causes for incorrect folding and explain how each may be corrected.
- What segments of quality assurance would be inspected at the completion of the sample run?
- What action should be taken if viscosity of adhesive in gluing unit is too low / high?
- How is the application of the glue adjusted?
- What areas of the machine should be adjusted if carton blank is creasing?
- What areas of the machine should be adjusted if carton blanks are not entering the machine?
- What areas of the machine should be adjusted if sheets are not neatly entering delivery?

Machine shutdown and cleaning

- What OHS factors must be considered when cleaning the machine?
- What needs to be checked when correctly shutting down the machine?
- What needs to be checked when the finished work is prepared for dispatch?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?

- How can the machine be kept clear of surface rust (condensation)?
- What are the recommended cleaning agents?

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What quality aspects should be considered in a completed folded carton?
- What steps should be taken to ensure that important features of the production control system are followed?
- In what way might production need to be altered to meet client requirements?
- List FOUR items to be checked against the client's sample.

Information sources

- What machine manuals and safety documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machinery	<ul style="list-style-type: none"> • Royal 40, a Bobst Media or Bobst Domino with a computerised label printing unit
Glue	<ul style="list-style-type: none"> • PVA and hot melt
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision and solving most production problems

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a range of complex cartons as required in normal production on a Royal 40, a Bobst Media or a Bobst Domino
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Produce THREE crashlock, six-corner and specialty work carton jobs, with different sizes and weights of carton board and including use of multiple gluing units, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- For example a Royal 40, a Bobst Media or a Bobst Domino

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF311B**Prepare for cutting forme and stripper making****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to prepare for making cutting formes and strippers.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit covers preparation for making cutting formes and strippers.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Prepare for die and stripper making | <ul style="list-style-type: none"> 1.1 Die and stripper making requirements are identified and selected from die drawing or inspection 1.2 Availability of all job related components is checked 1.3 Materials chosen are appropriate for cutting forme design and the machine cutting forme / stripper is to be used on |
| 2. Prepare materials | <ul style="list-style-type: none"> 2.1 Cutting forme / stripper making materials are assessed and cut to size 2.2 Cutting forme / stripper making materials are correct size for production requirements 2.3 Stripper backing material is correct size for production requirements 2.4 Product design is drawn onto cutting forme blank to match cutting forme design 2.5 Drawing is in register on cutting forme blank 2.6 Drawing is in register on stripper backing material |
| 3. Prepare lay down sheet and cutting forme tracing | <ul style="list-style-type: none"> 3.1 Lay down sheet and cutting forme tracing are glued correctly onto cutting forme blank 3.2 Lay down sheet is in register on cutting forme blank 3.3 Cutting forme tracing matches product design |
| 4. Design location of bridges, stripping rule and mounting holes | <ul style="list-style-type: none"> 4.1 Cutting forme maintains required strength 4.2 Waste is cut to suit waste extraction system 4.3 Mounting holes register with holes in cutting forme blank |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when interpreting the drawings and transferring the design onto the cutting forme blank, and when identifying die and stripper making requirements from the drawing
- Planning and organising by identifying resource requirements and choosing materials relevant to the task
- Teamwork when preparing cutting formes and strippers in a workplace context
- Using technology by gluing the lay down sheet tracing onto cutting forme blank
- Problem solving by cutting waste to suit the waste extraction system

Required knowledge:

The following knowledge must be assessed as part of this unit:

Interpreting drawings

- What special requirements may be identified from planner's drawings?

Cutting forme materials

- What OHS factors must be considered when cutting materials?
- Name the substrates commonly cut by these cutting formes.
- How do different substrates affect forme setting?
- How is the size of the stripper backer material determined?

Design transfer procedures

- What care should be taken when drawing design onto blank?
- How is registration assured when drawing design onto blank?
- How is correct registration achieved when gluing and laying down the cutting forme tracing onto the cutting forme blank?

Bridges, stripping rule and mounting holes

- What factors determine the thickness of the stripping rule?
- What factors determine the position and number of the bridges?
- What factors determine the position and number of the mounting holes?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Complexity of process	<ul style="list-style-type: none"> Varied cutting formes according to manufacturer's differentiations
Degree of autonomy	<ul style="list-style-type: none"> Initiative and judgment are demonstrated
Enterprise procedures	<ul style="list-style-type: none"> Range of enterprise procedures within defined work area
Quality processes and standards	<ul style="list-style-type: none"> Should meet client requirements and enterprise and industry standards

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Prepare materials for cutting formes according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Prepare materials for TWO cutting formes (ONE large ONE small) to accommodate TWO differing typically used substrates using all of the relevant processes according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF312B Set cutting forme and strippers

ICPCF312B**Unit Descriptor****Set cutting forme and strippers**

This unit describes the performance outcomes, skills and knowledge required to set cutting formes and strippers.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set cutting formes and strippers, proofing the forme and maintaining both the cutting forme and strippers.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|---|
| 1. Cut cutting forme wood | 1.1 Bridge holes are accurately drilled
1.2 Saw cuts accurately match line drawing on cutting forme blank
1.3 Holes are reinforced and in register with fixing screws
1.4 Knives and creasers are cut and shaped accurately to suit cutting forme |
| 2. Prepare knives, creasers and cutting forme rubbers | 2.1 Knives and creasers are set accurately into place on cutting forme blank
2.2 Rubber is located on cutting forme to eject product and waste as required |
| 3. Set stripping material | 3.1 Stripping materials are attached securely and accurately to stripper backing material
3.2 Mounting strips are correctly fixed |
| 4. Proof the cutting forme | 4.1 Sample meets production order specifications
4.2 Cutting forme is adjusted or re-cut if required |
| 5. Maintain cutting forme and stripper | 5.1 Correct number is allocated to cutting formes / strippers and recorded
5.2 Cutting forme machine is cleaned according to OHS and enterprise procedures
5.3 Problems are accurately described to supervisor / maintenance department
5.4 Status of cutting formes / strippers is reported correctly and without delay to production |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by recording the cutting forme / stripper identification number and reporting problems to supervisors or the maintenance department
- Planning and organising by cleaning the cutting forme machine according to OHS and enterprise procedures
- Teamwork when setting cutting formes and strippers in a workplace context
- Using technology by using cutting formes and strippers
- Problem solving by noting cutting forme making machine maintenance problems

Required knowledge:

The following knowledge must be assessed as part of this unit:

Forme and knife shaping

- What needs to be checked to correctly position bridge holes?
- How are the bridge holes reinforced?
- What checks can be performed to ensure that the saw cuts accurately match the line drawings?
- What needs to be checked when cutting and shaping the knives and creasers?

Knife setting

- What OHS concerns are there when setting knives?
- What factors determine the amount of rubber attached to the forme?
- What factors determine the positioning of the rubber on the forme?
- List THREE important items to consider when setting the knives and creasers into position on the forme blank.

Stripper setting

- What needs to be checked when attaching stripping materials to stripper backing materials?
- How is the attachment of stripper materials completed accurately?
- Explain the purpose of the mounting strips.

Proofing

- List FOUR areas that must be proofed to ensure that the cutting forme meets the production order specifications.
- Why is it important to allocate numbers to each forme?
- What method of recording the forme allocation numbers is the accepted formula?

Machine cleaning and maintenance

- What OHS factors must be considered when cleaning the machine?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?
- What are the recommended cleaning agents?
- Describe the method of recording and reporting machine maintenance problems.

- What indicators show that the machine is in need of oiling / greasing?

Quality assurance

- List the conditions to be noted when noting / reporting the status of the cutting forme or stripper.
- Why is it important to monitor the condition of the forme and stripper?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Complexity of process	<ul style="list-style-type: none"> • Varied cutting formes according to manufacturer's differentiations
Degree of autonomy	<ul style="list-style-type: none"> • Initiative and judgment are demonstrated
Enterprise procedures	<ul style="list-style-type: none"> • Range of enterprise procedures within defined work area
Quality processes and standards	<ul style="list-style-type: none"> • Should meet client requirements and enterprise and industry standards

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly setting the cutting formes and strippers according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Prepare TWO cutting formes (ONE large ONE small) to accommodate TWO differing typically used substrates using all of the relevant processes according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF311B Prepare for cutting forme and stripper making

ICPCF320B**Produce complex converted or finished product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to cover complex die cutting, embossing, folding, collating or fastening.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to complete operations involving complex die cutting, embossing, folding, collating or fastening.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain reel transportation system (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and rewind section is monitored and adjusted to ensure efficient continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added and removed to and from the process according to job specifications 1.4 Delivery is monitored and adjusted to ensure quality and efficient product delivery 1.5 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 2. Maintain sheet transportation system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added and removed to and from the process according to job specifications |
| 3. Maintain cutting system | <ul style="list-style-type: none"> 3.1 Knife or die condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of cutting devices and knives or dies are monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting devices or dies is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- | | | | |
|----|---|-----|--|
| 4. | Maintain complex process | 4.1 | Registration and squareness of folds are monitored and adjusted to ensure the quality of product meets the standard of the approved sample, if relevant |
| | | 4.2 | Collating / inserting process is monitored and adjusted to ensure quality of product meets the standard of the approved sample, if relevant |
| 5. | Maintain operation of complex fastening (adhesive / mechanical / sewing) system (IF RELEVANT) | 5.1 | Registration of fastening is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 5.2 | Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 5.3 | Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample |
| | | 5.4 | Thread tension and stitch quality are monitored and adjusted to ensure quality of product meets standard of the approved sample |
| 6. | Maintain production process | 6.1 | Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule |
| | | 6.2 | Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures |
| | | 6.3 | Manual and / or automatic control is used according to job specifications |
| | | 6.4 | Performance is monitored and verified using the process control system according to enterprise procedures |
| | | 6.5 | Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention |
| | | 6.6 | Process adjustments to eliminate problems are reported according to enterprise procedures |
| | | 6.7 | Faulty performance of equipment is identified and reported according to enterprise procedures |
| | | 6.8 | Waste is sorted according to enterprise procedures |
| 7. | Identify and rectify problems or faults | 7.1 | Product and substrate are monitored and tested to ensure conformance to client requirements |
| | | 7.2 | Problems in converting / finishing machine operation are identified and reported according to enterprise procedures |
| | | 7.3 | Adjustments or corrections are carried out according to specified procedures and manufacturer's specifications |
| | | 7.4 | Converting / finishing machine operation is checked to ensure correct operation |

- 8. Conduct shutdown of production process
 - 8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 8.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 8.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 8.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 8.5 Repair / adjustment is verified prior to resumption of operations

- 9. Clean converting / finishing machine at end of run
 - 9.1 Cutting devices and knives or dies are cleaned or replaced ready for next run (IF RELEVANT)
 - 9.2 Cutting devices are sharpened according to OHS procedures (IF RELEVANT)
 - 9.3 Machine bed is cleaned ready for next run
 - 9.4 All units are disengaged and cleaned ready for next run
 - 9.5 Glue system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures (IF RELEVANT)
 - 9.6 Laminating machine is disengaged and cleaned ready for next run (IF RELEVANT)
 - 9.7 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run OR
 - 9.8 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 9.9 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by accurately completing production records and other documentation
- Planning and organising by shutting down and cleaning machines at the end of a run
- Teamwork following the production process in association with fellow workers
- Using technology by correctly following shutdown procedures
- Problem solving by monitoring and adjusting the feeder to ensure efficient and continuous feeding to the machine

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet or section transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?
- What area of the web control system should be adjusted to maintain correct positioning of the web?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What parts of the sheet or section pick-up system are to be adjusted to ensure accurate and continuous sheet handling?

Reel or sheet or section delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the delivery system should be observed to maintain tension?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?

Complex cutting / embossing processes

- What OHS factors must be considered when maintaining the cutting process?
- What indicators demand the replacement of a knife / cutting edge?
- What needs to be checked when cutting pressure is adjusted?
- What are FOUR important points to monitor when maintaining the cutting process?
- How are the following checked: cutting pressures, cutting registration, packing of cutting area, condition of cutting edges, the smooth running of the operation?
- List THREE ways in which a clean and precise result can be guaranteed.
- What production difficulties can be expected during production runs?

Cutting machine faults and problems

- What OHS factors must be considered when problem solving on the machine

maintaining the cutting process?

- What needs to be checked when packing cutting devices?
- What needs to be checked when correcting dull cutting edges on equipment?
- What needs to be checked when correcting the depth of embossing?
- What needs to be checked when correcting out-of-square results?
- Explain the procedure for correcting THREE common machine faults.

Complex folding processes

- What OHS factors must be considered when using the folding machine?
- List FOUR areas to continuously observe to ensure the smooth trouble-free operation of the machine.
- What areas of the gluing unit should be continuously monitored?
- Explain the terms buckle folding, knife folding, side lay, pharmaceutical folding, deflector, glue line.

Folding machine problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- Name SIX causes of out-of-square folding and explain how each may be corrected.
- What segments of quality assurance would be inspected at the completion of the sample run?
- What action should be taken if the gate fold unit is out of timing?
- What action should be taken if the viscosity of adhesive in the gluing unit is too low / high?
- What action should be taken if the gluing unit is out of timing?
- What action should be taken if right angle fold is out-of-square?
- What areas of the machine should be adjusted if the sheet is creasing?
- What areas of the machine should be adjusted if the sheet is caught in the fold plate?
- What areas of the machine should be adjusted if the sheet is not entering the machine?
- What areas of the machine should be adjusted if sheets are not entering delivery neatly?
- Explain how to remedy the following problems: job is out-of-square, ink too wet for production, job does not coincide with the sample, the sheet is creasing, the sheet is caught in the fold plate, the sheet is not entering the machine, the sheet falls out of the machine after folding.

Collating machine operation

- Consideration should be given to what areas of OHS when the machine is operating?
- What factors govern the speed at which the machine will operate?
- What would indicate that the machine was in need of lubrication?
- Under what circumstances would the machine need to be adjusted?
- What OHS factors should be considered before readjusting the machine?

Collating machine problems and faults

- What areas of the machine would cause sheets to crease during production?
- What would cause sheets to misfeed during production?
- How would creasing of sheets be corrected?
- What method of correction is needed to prevent double sheet feeds?
- What adjustment must be made to prevent "bruising" of NCR sheets?
- What areas are to be checked when sections are failing to open on the chain?

Complex fastening processes

- What OHS factors must be considered when maintaining or adjusting the operation of the machines?

- What OHS factors must be considered when using hot melt adhesive?
- What is the consequence of too much or too little adhesive?
- What safety clothing is available for use when operating adhesive binders?
- What determines the speed of production?
- Name FOUR sectors to observe to guarantee that the production process is trouble-free and continuous.

Fastening machine problems and faults

- When would the machine need to be adjusted?
- When would the machine need to be slowed down?
- When can machine speed be increased?
- On an adhesive binder / gluer how are position and quantity of adhesive adjusted?
- On an adhesive binder / gluer how are adhesive thickness and pressure adjusted?
- On an adhesive binder how can more spine milling be achieved?
- On a wire stitcher how is the wire length adjusted?
- On a wire stitcher how can the wire be straightened in the wire feed?
- On a high frequency welder when should dwell time be increased / decreased?
- On a high frequency welder when should current be increased / decreased?

Machine shutdown and cleaning

- What OHS factors must be considered when cleaning the machine?
- What needs to be checked when shutting down a given machine?
- Give the important reasons for FOUR shutdown operations.
- What areas of the machines need regular cleaning?
- What materials need to be cleaned from the machine?
- What are the recommended cleaning agents?
- How can the machines be kept clear of surface rust (condensation)?

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What quality aspects need to be monitored during production?
- What quality aspects need to be checked on finished product?
- What steps should be taken to ensure that important features of the production control system are followed?
- In what way might production need to be altered to meet client requirements?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Converting / finishing processes	<ul style="list-style-type: none"> • Flat-bed or rotary die or forme cutting, embossing • Sequenced, multiple folding or gusseting • Collating / inserting of sheets or book sections, or reels (may include tabs, crimping) of varied form, weight or shape • Adhesive fastening (such as cold and hot melt gluing, taping) of substrates of varied form, weight or shape, eg hard case making, casing in, spine lining, multiple head and complex pattern gluing • Mechanical fastening (such as wire stitching, loop stitching) of substrates of varied form, weight or shape • Section sewing
Equipment	<ul style="list-style-type: none"> • Either single process machines or multiple process machines
Complexity	<ul style="list-style-type: none"> • At least one major process must be complex as defined in this unit or the appropriate set up unit
Shapes for die cutting / embossing	<ul style="list-style-type: none"> • Complex, multiple shapes
Cutting units	<ul style="list-style-type: none"> • A range of machines with dies, cutting formes and manual, semi-automated, fully automated or computerised process control
Folding units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
Collating units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
Fastening units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control

In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as numbering, date stamping and basic converting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg printing or coating) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet or large or small book or section handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly produce complex converted or finished product involving complex die cutting, embossing, folding, collating or fastening according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on any converting or finishing equipment (whether involving one process or a sequence of processes)
- Demonstrate all safety devices on the machine
- On the chosen equipment TWO different complex jobs must be demonstrated preferably involving different types, sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF321B**Set up and produce complex guillotined product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to complete complex guillotining (including knife changing) involving programmable guillotines and / or complex cutting sequences.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to complete complex guillotining (including knife changing) involving programmable guillotines and / or complex cutting sequences.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Grip and lay edges of sheet are identified |
| 2. Install and replace cutting knives into machine | <ul style="list-style-type: none"> 2.1 Appropriate knives are selected and safely secured to machine 2.2 Dull knives are removed and bolted securely to protective board 2.3 Cutting sticks are replaced when necessary |
| 3. Set up machine for guillotining | <ul style="list-style-type: none"> 3.1 Guillotine is set up and adjusted according to job specifications 3.2 Clamping pressures are set up and adjusted according to job specifications |
| 4. Conduct sample cut | <ul style="list-style-type: none"> 4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures 4.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 4.4 Results are interpreted to determine adjustment requirements 4.5 Adjustment changes are carried out according to product and machine specifications |
| 5. Maintain guillotining process | <ul style="list-style-type: none"> 5.1 Knife and cutting stick condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample 5.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 5.3 Registration of knives is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- | | |
|---|---|
| 6. Maintain operation of production process | <ul style="list-style-type: none"> 6.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 6.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 6.3 Manual and / or automatic control is used according to job specifications 6.4 Performance is monitored and verified using the process control system according to enterprise procedures 6.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 6.6 Process adjustments to eliminate problems are reported according to enterprise procedures 6.7 Faulty performance of equipment is identified and reported according to enterprise procedures 6.8 Waste is sorted according to enterprise procedures |
| 7. Identify and rectify problems and faults | <ul style="list-style-type: none"> 7.1 Problems in guillotining machine operation are identified and reported according to enterprise procedures 7.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 7.3 Guillotining machine operation is checked to ensure correct operation |
| 8. Conduct shutdown of production process | <ul style="list-style-type: none"> 8.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 8.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 8.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 8.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 8.5 Repair / adjustment is verified prior to resumption of operations |
| 9. Clean guillotining machine at end of run | <ul style="list-style-type: none"> 9.1 Knife and machine bed are cleaned ready for next run 9.2 Cutting machine is disengaged and cleaned ready for next run 9.3 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by liaising with clients as required to maintain or adjust production, and reading and interpreting job specifications
- Planning and organising by correctly shutting down and cleaning the machine at the end of a run
- Teamwork when maintaining the production process in association with fellow workers
- Using technology by setting up and adjusting clamping pressures according to job specifications
- Problem solving by selecting appropriate knives and securely fixing them to the machine

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning cutting would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- List and explain SIX trade terms that may be used in the documentation for complex cutting or guillotine knife change operations.
- What elements must be considered when planning a cutting sequence?

Replacement and installation of guillotine knives

- What OHS factors must be considered when handling knife blades during the knife change operation?
- What are the recommended knife angles for general cutting?
- When would a double bevel be needed on a guillotine knife?
- What factors indicate that a new blade is needed?
- What can result if a dull blade is continuously used?
- How can you tell a sharp knife from a dull knife?
- What information must be sent with dull knife when replaced?
- When is it necessary to replace a cutting stick?
- What forces are acting on a guillotine knife?

Setting up and operating guillotine

- What OHS factors must be considered when setting up and operating the guillotine?
- What factors should be considered when setting up a guillotine for a complex cutting job?
- How is the correct clamping pressure chosen for a given job?
- What can result if the clamp pressure is not appropriate for the stock?
- How is the clamp pressure adjusted?
- What clamp pressure is recommended for NCR paper?
- What clamp pressure is recommended for 80gsm offset paper?
- What clamp pressure is recommended for 2400um strawboard?
- What can be expected if the knife angle is less than 19 degrees?
- What can be expected if the knife angle is more than 24 degrees?

- When would a knife with a double angle be needed?
- What are the knife angles on a double bevelled knife?
- What are the largest and smallest size sheets that can be processed on this machine?
- What procedures can be used to complete undersize requirements?
- How can a "work and turn" job be recognised?
- How can a "work and twist" job be recognised?
- How can a "work and tumble" job be recognised?
- How can a "work and back" job be recognised?
- What problems can occur when activating the automatic knife?
- List FOUR types of job not suitable for automatic cutting.
- What important operation is required to trim multi-section books or magazines with bulky spines?

Checking and adjustment

- What OHS factors must be considered when checking and adjusting the machine?
- To what parameters should the machine be adjusted?
- Checks should be made to which areas after readjustment?
- Explain the settings that may need to be altered after checking.
- What items of the cutting result should be checked against the sample?
- What steps are taken if the cutting result does not coincide with the sample?
- What areas of the machine should be continuously monitored?
- How can a lay and gripper edge be identified if not marked (FIVE methods)?

Maintaining cutting production

- What OHS factors must be considered when maintaining the production process?
- What production factors must be considered when maintaining the production process?
- What production difficulties can possibly affect the smooth production flow?
- What reporting procedures are to be followed if the machine should malfunction?
- How is waste from the guillotine area treated / disposed of?
- Name FOUR ways to mark lay and gripper edges on sheets.
- What can result if lay and grip edges are not recognised?
- When would it be necessary to build-up the clamp of a guillotine?
- Explain how the clamp of a guillotine is "packed up".
- What important operation is required to trim multi-section books or magazines with bulky spines?

Cutting faults

- Give FOUR reasons why the guillotine knife will not operate when the machine is turned on.
- Give FOUR reasons why a book block may be cut out-of-square.
- Give FOUR reasons for the program not working after it has been entered into the machine.
- What part of the guillotine should be checked if, after a cut, the top sheets are longer than the bottom sheets?
- What part of the guillotine should be checked if, after a cut, the top sheets are shorter than the bottom sheets?
- What result will result if the cutting stick is not replaced regularly?
- What part of the guillotine should be checked if, after a cut, the top sheets are out-of-square?
- What part of the guillotine should be checked if, after a cut, the top sheets are creasing along the cut line?
- When might it be necessary to remove the clamp plate and what needs to be checked

when this is done?

- How do you recognise the need for machine lubrication?
- Where do you find out information about correct types and methods of lubrication?

Machine shutdown and cleaning

- What OHS factors must be considered when shutting down and / or cleaning the machine?
- What special operations are essential when shutting down the machine?
- What maintenance procedures should be used to keep the machine in good condition and order?
- What methods are employed to rid the machine of waste?
- What cleaning agents are used on the guillotine?

Quality assurance

- What quality aspects should be considered in a completed cutting job?
- What steps should be taken to ensure that important features of the production control system are followed?
- In what way might production need to be altered to meet client requirements?
- List FOUR items that must be checked against the client's sample.
- What steps should be taken if the test sample is incorrect?
- What areas of the finished product should be inspected?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Single knife, programmable guillotines, complex cutting sequence
Cutting units	<ul style="list-style-type: none"> • Range of semi-automated, automated or computerised guillotines
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Large or small sheet handling systems

Degree of autonomy

- Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up and produce complex guillotined product according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up (including knife change) and produce THREE complex guillotined products (THREE different substrates eg paper, strawboard, plastic, book cloth, and both large and small sheets) using a semi-automated or automated electronic guillotine, and setting a complex cutting program according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF326B**Unit Descriptor****Undertake pre make-ready for die cutting**

This unit describes the performance outcomes, skills and knowledge required to prepare cutting formes (two large and two small) to accommodate different complexities of cutting with multiple images with extremely tight registration and highly accurate cutting requirements.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to prepare cutting formes (two large and two small) to accommodate different complexities of cutting with multiple images with extremely tight registration and highly accurate cutting requirements. It is generally used in the packaging industry.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Obtain job instructions and locate forme | 1.1 Job sheets or instructions are interpreted correctly
1.2 Existing formes are located in storage area using filing system and new formes and associated tooling are collected from holding location |
| 2. Check cutting forme | 2.1 Cutting forme / tooling is checked against master sample for accuracy of cut and fold
2.2 Centre line is located and checked to ensure accuracy of positioning / registration on Bobst |
| 3. Position and set up counters | 3.1 Cutting plate is located and prepared for counters
3.2 Counters are accurately positioned and set up on cutting plate to ensure registration with cutting forme |
| 4. Conduct sample cut | 4.1 Material to be used for sample cut is obtained
4.2 Cutting forme and cutting plate are accurately positioned on machine
4.3 Machine is operated to produce sample according to enterprise procedures |
| 5. Check sample | 5.1 Sample is accurately cut and registration of tooling is precise
5.2 Forme or tooling is adjusted if necessary according to job specifications
5.3 Sample is confirmed as correct by supervisor if required |
| 6. Set up stripping forme and blank separator | 6.1 Pins are positioned on stripping forme to ensure accurate removal of waste board
6.2 Blank separator is set up according to job specifications |
| 7. Undertake filing procedure | 7.1 Correct identification number is allocated to cutting formes / tooling and strippers and recorded
7.2 Information is correctly entered into filing system according to enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by interpreting job sheets correctly during set up
- Planning and organising when setting up machinery and materials
- Teamwork when discussing a sample with the supervisor
- Using technology by setting up machinery
- Problem solving by adjusting forme or tooling for precise cutting

Required knowledge:

The following knowledge must be assessed as part of this unit:

Forme and knife sharpening

- What needs to be checked to correctly position bridge holes?
- How are the bridge holes reinforced?
- What checks can be performed to ensure that the saw cuts accurately match the line drawings?
- What needs to be checked when cutting and shaping the knives and creasers?

Knife setting

- What OHS concerns are there when setting knives?
- What factors determine the amount of rubber attached to the forme?
- What factors determine the positioning of the rubber on the forme?
- List THREE important items to consider when setting the knives and creasers into position on the forme blank.

Stripper setting

- What needs to be checked when attaching stripping materials to stripper backing materials?
- How is the attachment of stripper materials completed accurately?
- Explain the purpose of the mounting strips

Proofing

- List FOUR areas that must be proofed to ensure that the cutting forme meets the production order specifications.
- Why is it important to allocate numbers to each forme?
- What method of recording the forme allocation numbers is the accepted formula?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Context | <ul style="list-style-type: none"> • This competency is performed between the making of the cutting forme and it going to the cutting machine for normal make ready |
| Degree of autonomy | <ul style="list-style-type: none"> • Working under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Prepare cutting formes (two large and two small) to accommodate different complexities of cutting with multiple images with extremely tight registration and highly accurate cutting requirements
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Prepare FOUR cutting formes (two large and two small) to accommodate TWO different complexities of cutting. At least ONE must contain multiple images with extremely tight registration and highly accurate cutting requirements
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF327B**Set up machine for complex rotary die cutting or embossing****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex rotary die cutting or embossing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for complex rotary die cutting or embossing.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Mount rotary cutting or embossing devices | <ul style="list-style-type: none"> 2.1 Cutting devices or dies are correctly mounted to die cylinders 2.2 Cutting devices or dies are registered and proofed on die cylinder 2.3 Appropriate cutting devices or dies are selected and secured to machine according to job specifications |
| 3. Set up reel system (OR Element 4) | <ul style="list-style-type: none"> 3.1 Unwind and rewind reels are set up and adjusted according to job specifications 3.2 Webbing procedures are carried out according to job specifications 3.3 Web control system is set up and adjusted according to job specifications 3.4 Reels are spliced / joined according to job specifications 3.5 Folder and sheeter are set up and adjusted according to job specifications |
| 4. Set up sheet system (OR Element 3) | <ul style="list-style-type: none"> 4.1 Feeder and delivery systems are set up and adjusted according to job specifications 4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications 4.3 Transfer systems are set up and adjusted according to job specifications 4.4 Substrate is removed from process according to job specifications |
| 5. Set up machine for basic rotary cutting | <ul style="list-style-type: none"> 5.1 Rotary cutting devices are set up and adjusted according to job specifications 5.2 Cutting pressures are set up and adjusted according to job specifications 5.3 Counter knives / anvils are set in correct position |

- 6. Set up in-line units
 - 6.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications
 - 6.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards)

- 7. Conduct sample run
 - 7.1 Material to be used for sample is organised correctly
 - 7.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 7.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 7.4 Results are interpreted to determine adjustment requirements
 - 7.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by reading and interpreting job specifications
- Planning and organising when installing a rotary cutting or embossing device into the machine
- Teamwork when giving assistance with the setting up of in-line units
- Using technology when setting up the web control system and adjusting according to job specifications
- Problem solving by readjusting settings based on results of the sample run

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning rotary die cutting or embossing would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What factors must be considered when deciding on a cutting system?

Mounting and installing rotary cutting devices

- What needs to be checked when cutting devices are mounted on a cylinder?
- Explain TWO methods each of registering and proofing the cutting devices.
- What needs to be checked when the cutting devices are attached to the machine?
- What criteria determine the selection of particular cutting devices?

Reel transportation and delivery systems

- What OHS concerns are there when setting up reel transportation systems?
- What adjustments to the unwind reel may be needed to suit various jobs?
- What are the important areas to be considered during webbing procedures?
- List and explain the adjustments available to the web.
- What needs to be checked when splicing / joining the web?
- What important areas of the reel delivery system may need to be adjusted according to job specifications?
- What steps should be taken to ensure that the delivery system operates effectively?
- When might it be necessary to make an adjustment to the sheeter during production?
- When might it be necessary to make an adjustment to the folder during production?
- When might it be necessary to make an adjustment to the rewind wheel during production?

Sheet transportation and delivery systems

- What OHS factors must be considered when setting up and / or operating sheet transport and delivery systems?
- List FOUR important areas or sections of the feeder unit set up.
- What adjustments can be made to the machine to facilitate accurate sheet pick-up and transportation?

- What areas of the delivery system should be observed to maintain neat delivery of finished work?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?
- List FOUR ways in which the finished product can be secured for dispatch.

Setting up the machine for complex rotary die cutting or embossing

- What OHS factors must be considered when setting up rotary cutting devices?
- What needs to be checked when setting up, adjusting and operating rotary cutting machines?
- How is the machine pressure determined?
- How are the machine cutting depths determined?
- Why do you adjust lays for registration and what needs to be checked when it is done?
- What could eventuate if the counter knives / anvils are incorrectly set?
- What is the largest / smallest size sheet that can be processed on this machine?

In-line processes

- When would it be necessary to adjust in-line units?
- What areas should be checked to ensure the suitability of in-line processes?

Checking and adjustment

- What details of the completed sample should be examined to ensure conformance with the client's requirements?
- What common faults can occur with the rotary cutting process?
- What factors indicate a need for the replacement of knives / blades / cutting edges?
- How should the cutting edges and counter knives (anvils) be stored to guard against damage and deterioration?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|-----------------|---|
| Cutting process | • Rotary die and forme cutting, embossing |
| Shapes | • Simple, multiple shapes |

- | | |
|----------------------|---|
| Rotary cutting units | <ul style="list-style-type: none"> • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control |
| In-line processes | <ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Substrate types | <ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal |
| Substrate handling | <ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems |
| Degree of autonomy | <ul style="list-style-type: none"> • Working under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machine for complex rotary die cutting or embossing according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on EITHER rotary die cutting OR embossing. For either process set up TWO complex jobs (including in-line processes) with different substrates, sizes and patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF320B Produce complex converted or finished product

ICPCF328B**Produce complex rotary die cut or embossed product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce complex rotary die cut or embossed product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to maintain the operation of machinery and the production process, rectify problems and shut down the equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain operation of reel system (OR Element-2) | <p>1.1 Reel stand and rewind section are monitored and adjusted to ensure efficient continuous operation to maintain correct tension and to ensure no marks, blemishes or damage to finished product</p> <p>1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation</p> <p>1.3 Substrate is added to and removed from the process according to job specifications</p> <p>1.4 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery</p> |
| 2. Maintain operation of sheet system (OR Element-1) | <p>2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine</p> <p>2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation</p> <p>2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation</p> <p>2.4 Substrate is added to the process according to job specifications</p> |
| 3. Maintain operation of complex rotary die cutting or embossing process | <p>3.1 Knife condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample</p> <p>3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample</p> <p>3.3 Registration of knife(s) is monitored and adjusted to ensure quality of product meets the standard of the approved sample</p> <p>3.4 Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of sample approved</p> |

- | | |
|--|--|
| 4. Maintain production process | <ul style="list-style-type: none"> 4.1 In-line printing / converting / binding / finishing processes are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 4.4 Manual and / or automatic control is used according to job specifications 4.5 Performance is monitored and verified using the process control system according to enterprise procedures 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures 4.9 Waste is sorted according to enterprise procedures |
| 5. Identify and rectify rotary cutting machine problems and faults | <ul style="list-style-type: none"> 5.1 Problems in rotary cutting machine are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 5.3 Cutting rotary machine operation is checked to ensure correct operation |
| 6. Conduct shutdown of production process | <ul style="list-style-type: none"> 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.5 Repair / adjustment is verified prior to resumption of operations |
| 7. Clean rotary cutting units at end of run | <ul style="list-style-type: none"> 7.1 Knife and machine bed are cleaned ready for next run 7.2 Cutting devices are sharpened correctly according to OHS requirements and enterprise procedures 7.3 Cutting machine is disengaged and cleaned ready for next run 7.4 In-line printing / converting / binding / finishing units are cleaned ready for next run 7.5 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 7.6 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 7.7 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills by monitoring and verifying performance using process control systems
- Planning and organising when following the correct shutdown sequence
- Teamwork when conducting shutdown with fellow workers
- Using technology when adjusting machinery to improve performance
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?
- What area of the web control system should be adjusted to maintain correct positioning of the web?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What parts of the sheet pick-up system are to be adjusted to ensure accurate and continuous sheet handling?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the delivery system should be observed to maintain tension?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?

Rotary cutting operations

- What OHS factors must be considered when maintaining the cutting process?
- List FOUR items of importance to consider when maintaining rotary cutting operations.
- How are the following checked: cutting pressures, cutting registration, packing of cutting area, condition of cutting edges, the smooth running of the operation?
- What indicators demand the replacement of cutting edges?
- What needs to be checked when cutting accuracy is adjusted?
- List THREE ways in which a clean and precise result can be guaranteed.
- What production difficulties can be expected during production runs?

Machine problems and cutting faults

- What OHS factors must be considered when problem solving on the rotary machine cutting process?

- What needs to be checked when packing cutting devices?
- Explain the procedure for correcting any machine faults.

Machine shutdown and cleaning

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked when shutting down the machine?
- What needs to be checked when the cutting devices or knives are cleaned, stored or replaced ready for the next run?
- List the areas of the machine that require cleaning at the end of the run.
- What cleaning agents are used in cleaning the machine?
- What build-ups need to be cleaned from the machine?

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What quality aspects should be considered in a completed rotary cutting job?
- What steps should be taken to ensure that important features of the production control system are followed?
- What production areas may have to be adjusted to meet client requirements?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Rotary die and forme cutting, and embossing
Shapes	<ul style="list-style-type: none"> • Complex, multiple shapes
Rotary cutting units	<ul style="list-style-type: none"> • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control

In-line processes	<ul style="list-style-type: none"> Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce complex products that meet job specifications and production timeframes using rotary cutting or embossing equipment
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on EITHER rotary die cutting OR embossing. For either process produce TWO complex jobs (including in-line processes) with different substrates, sizes and patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF327B Set up machine for complex rotary die cutting or embossing

ICPCF341B**Set up machine for complex sequenced or multiple folding****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex folding.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for complex folding.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up reel system (OR Element 3) | <ul style="list-style-type: none"> 2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to job specifications 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications 2.5 Folder and sheeter are set up and adjusted according to job specifications |
| 3. Set up sheet system (OR Element 2) | <ul style="list-style-type: none"> 3.1 Feeder is set up and adjusted according to job specifications 3.2 Double / misfeed detectors are set up according to job specifications 3.3 Sheet pick-up and transportation system is set up and adjusted according to job specifications 3.4 Transfer systems are set up and adjusted according to job specifications 3.5 Material delivery is set up and adjusted according to job specifications |
| 4. Set up machine for complex sequenced or multiple folding | <ul style="list-style-type: none"> 4.1 Buckle / knife folding units are set up and adjusted according to job specifications 4.2 Folding rollers / belts / rails are set up and adjusted according to job specifications |
| 5. Set up in-line units | <ul style="list-style-type: none"> 5.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards) |

- 6. Conduct sample run
 - 6.1 Material to be used for sample is organised correctly
 - 6.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 6.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 6.4 Results are interpreted to determine adjustment requirements
 - 6.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when reading and interpreting job specifications
- Planning and organising when setting up the machine for complex folding and ensuring the availability of all job related components
- Teamwork when assisting with the set up of in-line units
- Using technology when setting up the sheet delivery system on a sheet-fed machine
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning folding requirements would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What factors must be considered when planning a folding sample?

Reel transportation and delivery systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?
- What area of the web control system should be adjusted to maintain correct positioning of the web?

Sheet transportation and delivery systems

- What OHS factors must be considered when setting folder transportation and delivery systems?
- What areas of the sheet-fed transportation system should be monitored to ensure trouble-free operation?
- What parts of the sheet pick-up system should be adjusted to ensure accurate and continuous sheet handling?
- What areas of the delivery system should be observed to maintain neat delivery of finished work?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?
- List FOUR ways in which the folded sheets can be secured for dispatch.

Setting up machine for complex folding

- What OHS factors must be considered when setting up and / or adjusting the folding unit?
- What is the largest / smallest size sheet that can be processed on this machine?

- In what ways can the machine be adapted to facilitate smaller / larger stock?
- What determines the accuracy of sheets entering folding rollers?
- What can cause scratching / scuffing of substrate during transportation?
- What determines the speed of the machine?
- What needs to be adjusted if the sheet is not reaching the fold unit?
- What needs to be adjusted if the sheet is turned on the transportation unit?
- What problems can be expected if the machine is running too fast?
- What problems can be expected if the machine rollers are set too loose?
- What problems can be expected if there is too much roller pressure?
- What problems can be expected if the delivery system is not set correctly?
- What determines the correct roller pressure for a given job?
- How can roller pressures be checked for correctness?
- What needs to be adjusted if the sheet is out-of-square?
- Give FOUR reasons for the sheet being out-of-square.
- What can be adjusted to ensure that the sheets are not smudging / "scuffing"?
- What needs to be adjusted if the sheet will not leave the folding unit?

In-line processes

- What OHS factors must be considered when adjusting machine units?
- What steps are taken to ensure correct alignment of in-line processes / units?
- What needs to be checked when operating the electronic gate fold unit?
- Why would you use a gate fold unit?
- When would a gluing unit be required on a job?
- What adhesive is used in the gluing unit?
- How is the length of the glue line adjusted?

Checking and adjustment

- Name SIX causes of out-of-square folding and explain how each may be corrected.
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if job is out-of-square?
- What communication action should be instigated if ink is too wet for production?
- What communication action should be instigated if job does not coincide with sample?
- What areas of the machine should be adjusted if the sheet is creasing?
- What areas of the machine should be adjusted if the sheet is caught in the fold plate?
- What areas of the machine should be adjusted if the sheet is not entering the machine?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|---|
| Folding process | <ul style="list-style-type: none">• Sequenced, multiple folding or gusseting |
| Folding units | <ul style="list-style-type: none">• A range of machines with manual, semi-automated, fully automated or computerised process control |
| In-line processes | <ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Substrate types | <ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal |
| Substrate handling | <ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for complex folding according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up THREE multiple sequenced folding jobs (eg letter folds, concertina folds) OR gusseting (envelope adjuster) jobs, using different sizes and weights of substrates (eg 45-110 gsm) and including use of a gluing unit and / or gate fold unit, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example this unit may be assessed at the same time as:

- ICPCF320B Produce complex converted or finished product.

Depending on the configuration of equipment and types of jobs, the following units may also be assessed at the same time:

- ICPCF231B Set up machine for basic flat-bed cutting
- ICPCF235B Set up machine for basic rotary cutting
- ICPCF261B Set up machine for basic adhesive, mechanical or thermal fastening
- ICPCF361B Set up machine for complex adhesive, mechanical or sewn fastening

ICPCF342B**Produce complex sequenced or multiple folded product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce complex folded product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain reel transportation system (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to the process according to job specifications |
| 2. Maintain sheet transportation system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to the process according to job specifications |

- 3. Maintain production process
 - 3.1 Registration and squareness of fold are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 3.2 Basic in-line printing / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 3.3 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 3.4 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 3.5 Manual and / or automatic control is used according to job specifications
 - 3.6 Performance is monitored and verified using the process control system according to enterprise procedures
 - 3.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 3.8 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 3.9 Faulty performance of equipment is identified and reported according to enterprise procedures
 - 3.10 Waste is sorted according to enterprise procedures
- 4. Identify and rectify problems and faults
 - 4.1 Problems in folding (sequenced / multiple) machine operation are identified and reported according to enterprise procedures
 - 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 4.3 Folding (sequenced / multiple) machine operation is checked to ensure correct operation
 - 4.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 4.5 Repair / adjustment is verified prior to resumption of operations
- 5. Conduct shutdown of production process
 - 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures

- 6. Clean folding (single / continuous) machine at end of run
 - 6.1 Folding units are disengaged and cleaned ready for next run
 - 6.2 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 6.3 Reel feed and transportation systems are disengaged and cleaned ready for next run
 - 6.4 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run
 - 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when monitoring and verifying performance using process control systems
- Planning and organising when following the correct shutdown sequence
- Teamwork when conducting the shutdown with fellow workers
- Using technology when setting up the sheet delivery system on a sheet-fed machine
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel transportation systems on web-fed machines

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?

Sheet transportation and delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What needs to be checked when substrate is removed from the machine?

Maintaining complex folding processes

- What OHS factors must be considered when using the folding machine?
- What are THREE areas to continuously observe to ensure the smooth trouble-free operation of the machine?
- What areas of the in-line process should be monitored to assure the quality of the product?

Faults and minor problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- What are TWO causes of out-of-square folding and explain how each may be corrected?
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if job is out-of-square?
- What communication action should be instigated if the ink is too wet for production?
- What communication action should be instigated if the job does not coincide with the sample?
- What part(s) of the machine should be adjusted if the sheet is creasing?

Machine shutdown and cleaning

- What OHS factors must be considered when cleaning the machine?
- What important tasks must be performed to correctly shut down the machine?
- How should the finished work be prepared for dispatch?

- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What quality aspects should be considered in a completed folded job?
- In what way might production need to be altered to meet client requirements?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Folding process	<ul style="list-style-type: none"> • Single, parallel or continuous folding
Folding units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a complex single or continuous folded product that meets the job specifications, production timeframes and quality standards
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Produce TWO jobs (if possible using different sizes and weights of substrate) EITHER with a single fold to run continuously OR a single quire fold on a sheet gather / stitch / fold / trim machine OR an automatic web-fed machine to achieve a single fold, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must take place in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF343B**Set up machine for complex collating or inserting (sheet / section / reel)****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex collating, gathering or inserting of sheets or sections.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for complex collating, gathering or inserting of sheets or sections and is appropriate for binding and finishing operations, mail houses and newspapers.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up reel system (OR Element 3) | <ul style="list-style-type: none"> 2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to job specifications 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications |
| 3. Set up sheet / section system (OR Element 2) | <ul style="list-style-type: none"> 3.1 Feeder and delivery systems are set up and adjusted according to job specifications 3.2 Sheet / section / reel pick-up and transportation system is set up and adjusted according to job specifications 3.3 Transfer systems are set up and adjusted according to job specifications 3.4 Substrate is removed from the process according to job specifications 3.5 Sheet / section / reel transfer and control system is set up and adjusted according to job specifications |
| 4. Set up machine and in-line units | <ul style="list-style-type: none"> 4.1 Collating / inserting system is set up and adjusted according to job specifications 4.2 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications 4.3 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards) |

- 5. Conduct sample run
 - 5.1 Material to be used for sample is organised correctly
 - 5.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 5.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 5.4 Results are interpreted to determine adjustment requirements
 - 5.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when organising a laboratory test, and reading and interpreting job specifications
- Planning and organising when setting up the sheet / section delivery system according to job specifications
- Teamwork when assisting with in-line set up units
- Using technology when using the double / misfeed sheet calliper system
- Problem solving by interpreting results of tests and determining adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What important information concerning collating will be included in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What elements must be considered when planning a collated sample?

Reel transportation system

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?
- What area of the web control system should be adjusted to maintain correct positioning of the web?

Sheet transportation and delivery systems

- What are the important factors to consider when setting up the feeder?
- Explain the setting up of the double / misfeed sheet calliper system.
- What should be considered to ensure smooth transportation of the sheets or sections to and through the machine?
- Name the different types of sheet / section delivery systems.

Machine operation and maintenance

- Consideration should be given to what areas of OHS when the machine is operating?
- What is the largest / smallest sheet / section size possible to be run on the machine?
- Which areas of the machine should be adjusted to allow for 42 gsm stock?
- What is the largest / smallest size sheet that can be processed on this machine?
- In what ways can the machine be adapted to facilitate smaller / larger stock?
- What factors govern the speed at which the machine will operate?
- What would indicate that the machine was in need of lubrication?

In-line processes

- What OHS factors must be considered when adjusting machine units?
- What steps should be taken to ensure correct alignment of in-line processes / units?
- What adjustments should be made to keep units correctly positioned?

Checking and adjustment

- What OHS factors are to be considered before readjusting the machine?
- What would constitute an acceptable collating result?
- What would be the cause of creasing of sheets in the machine delivery?
- How should the machine be adjusted to alleviate "bruising" of NCR paper?
- List FOUR items that must be checked against the client's sample.
- Under what circumstances would the machine need to be adjusted?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Collating process	<ul style="list-style-type: none"> • Collating / inserting of sheets or book sections, or reels (may include tabs, crimping) of varied form, weight or shape
Collating units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for complex collating or inserting according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Set up machines for complex collating (at LEAST four or five products) including in-line processes on FOUR occasions, if possible TWO sheet jobs each using different sizes and weights of substrate and TWO section jobs with and without lip / lap, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example this unit may be assessed at the same time as:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU207B Prepare machine for operation (basic)
- ICPCF320B Produce complex converted or finished product.

Depending on the configuration of equipment and types of jobs, the following units may also be assessed at the same time:

- ICPCF223B Set up machine for cutting (trimming)
- ICPCF261B Set up machine for basic adhesive, mechanical or thermal fastening
- ICPCF361B Set up machine for complex adhesive, mechanical or sewn fastening.

ICPCF344B**Produce complex collated or inserted (sheet / section / reel) product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce a complex collated or inserted sheet, section or reel product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain reel transportation system (OR Element 2) | <ul style="list-style-type: none"> 1.1 Clean collating or inserting (sheet / section / reel) machine at end of run 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to the process according to job specifications |
| 2. Maintain sheet transportation system (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling end efficient operation 2.4 Substrate is added to the process according to job specifications |

- 3. Maintain production process
 - 3.1 Collating or inserting process is monitored and adjusted to ensure quality of product meets the standard of the approved sample
 - 3.2 In-line printing / converting / binding / finishing processes are monitored and adjusted to ensure the quality of product meets the standard of the approved sample
 - 3.3 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule
 - 3.4 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 3.5 Manual and / or automatic control is used according to job specifications
 - 3.6 Performance is monitored and verified using the process control system according to enterprise procedures
 - 3.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention
 - 3.8 Waste is sorted according to enterprise procedures
- 4. Identify and rectify problems and faults
 - 4.1 Problems in collating or inserting (sheet / section / reel) machine are identified and reported according to enterprise procedures
 - 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level
 - 4.3 Collating or inserting (sheet / section / reel) machine operation is checked to ensure correct operation
 - 4.4 Process adjustments to eliminate problems are reported according to enterprise procedures
 - 4.5 Faulty performance of equipment is identified and reported according to enterprise procedures
- 5. Conduct shutdown of production process
 - 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 5.5 Repair / adjustment is verified prior to resumption of operations

- 6. Clean collating or inserting (sheet / section / reel) machine at end of run
 - 6.1 Collating or inserting machine is cleaned ready for next run
 - 6.2 In-line printing / converting / binding / finishing units are cleaned ready for next run
 - 6.3 Reel feed transportation and delivery systems are disengaged and cleaned ready for next run
 - 6.4 Sheet feed, transportation and delivery systems are disengaged and cleaned ready for next run
 - 6.5 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when monitoring and verifying performance using process control systems
- Planning and organising when following the correct shutdown sequence
- Teamwork when conducting shutdown with fellow workers
- Using technology when adjusting machinery to improve performance
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Collating machine operation

- Consideration should be given to what areas of OHS when the machine is operating?
- What factors govern the speed at which the machine will operate?
- What would indicate that the machine was in need of lubrication?
- Under what circumstances would the machine need to be adjusted?
- What OHS factors should be considered before readjusting the machine?

Machine problems and faults

- What areas of the machine would cause sheets to crease during production?
- What would cause sheets to misfeed during production?
- How could creasing of sheets be corrected?
- What method of correction is needed to prevent double sheet feeds?
- What adjustment must be made to prevent "bruising" of NCR sheets?
- What areas are to be checked when sections are failing to open on the chain?

Machine shutdown and cleaning

- What needs to be checked when correctly shutting down the machine?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?
- What are the recommended cleaning agents?

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What steps should be taken to ensure that important features of the production control system are followed?
- What would constitute an acceptable collating result?
- What would be the cause of creasing of sheets in the machine delivery?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|--|
| Collating process | <ul style="list-style-type: none">• Collating / inserting of sheets or book sections, or reels (may include tabs, crimping) of varied form, weight or shape |
| Collating units | <ul style="list-style-type: none">• A range of machines with manual, semi-automated, fully automated or computerised process control |
| In-line process | <ul style="list-style-type: none">• Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Substrate types | <ul style="list-style-type: none">• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal |
| Substrate handling | <ul style="list-style-type: none">• Wide or narrow reel or large or small sheet handling systems |
| Degree of autonomy | <ul style="list-style-type: none">• Working under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a complex collated product that meets job specifications, production timeframes and quality standards
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Operate machines for complex collating (at LEAST FOUR or FIVE products) including in-line processes on FOUR occasions (if possible TWO sheet jobs using different sizes and weight of substrate and TWO section jobs with and without lip / lap), according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must take place in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPSU201B Prepare, load and unload reels and cores on and off machine
- ICPSU202B Prepare, load and unload product on and off machine
- ICPSU208B Operate and monitor machines (basic)
- ICPCF342B Produce complex sequenced or multiple folded product

ICPCF361B**Set up machine for complex adhesive, mechanical or sewn fastening****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex adhesive, mechanical or sewn fastening. Some equipment may also involve cutting, trimming, folding and / or gathering (collating) which may be assessed at the same time.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up for complex adhesive, mechanical or sewn fastening.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|-------------------------------------|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Set up sheet / section system | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are set up and adjusted according to job specifications 2.2 Sheet / section pick-up and transportation system is set up and adjusted according to job specifications 2.3 Transfer systems are set up and adjusted according to job specifications 2.4 Substrate is removed from the process according to job specifications 2.5 Sheet / section transfer and control system is set up and adjusted according to job specifications |
| 3. Set up machine and in-line units | <ul style="list-style-type: none"> 3.1 Fastening system is set up and adjusted according to job specifications 3.2 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications 3.3 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards) |
| 4. Conduct sample run | <ul style="list-style-type: none"> 4.1 Material to be used for sample is organised correctly 4.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures 4.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures 4.4 Results are interpreted to determine adjustment requirements 4.5 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when organising a laboratory test and reading and interpreting job specifications
- Planning and organising when conducting a sample run
- Teamwork when giving assistance with setting up in-line units
- Using technology when setting up and adjusting the fastening system according to job specifications
- Problem solving when interpreting sample results to determine adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning binding requirements would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What elements must be considered when planning a binding sample?

Sheet / section transport and delivery systems

- What OHS concerns are there when setting up transportation systems?
- What special delivery problems are associated with adhesive machines?
- In what way are these problems overcome?
- Explain TWO different section feeding systems.
- What needs to be monitored on the delivery systems present on the various machines?
- List FOUR ways in which the completed work can be secured for dispatch.
- What is the largest / smallest size sheet that can be processed on this machine?
- In what ways can the machine be adapted to facilitate smaller / larger stock?

Setting up fastening equipment

- What OHS areas must be addressed when setting up fastening equipment on the machine?
- What determines the correct binding technique for a job?
- What OHS safeguards are necessary with hot melt adhesives?
- Explain the methods of adhesive metering present on the machine.
- What care should be taken to ensure a neat and clean adhesive binding job?
- What can be expected if sewing is not in the right position?
- What parts of the wire stitcher would need to be adjusted to process books of different thicknesses?
- What determines the position of the wire stitches on the book?
- What is the difference between a staple and a wire stitch?
- How is the appropriate wire calliper for a particular job determined?
- What is the largest / smallest size sheet that can be processed on each machine?
- In what ways can the machines be adapted to facilitate smaller / larger stock?

In-line processes

- What OHS areas must be addressed when setting up these areas of the machine?
- What in-line units are available for these binding processes?

Checking and adjustment

- What OHS factors should be considered before readjusting the machine?
- Under what circumstances would the machine need to be adjusted?
- What quality aspects should be considered in the completed binding job?
- What steps should be taken to ensure that important features of the production control system are addressed?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Fastening processes	<ul style="list-style-type: none"> • Adhesive fastening such as cold and hot melt gluing, taping of substrates of varied form, weight or shape, eg hard case making, casing in, spine lining, multiple head and complex pattern gluing • Mechanical fastening such as wire stitching, loop stitching of substrates of varied form, weight or shape • Section sewing
Fastening units	<ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control
Complexity	<ul style="list-style-type: none"> • Complex refers to use of automatic adhesive and thermal machines, multiple head mechanical machines, section sewers
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such

- | | |
|--------------------|--|
| Substrate types | <ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal |
| Substrate handling | <ul style="list-style-type: none"> • Large or small sheet / section handling systems |
| Degree of autonomy | <ul style="list-style-type: none"> • Working under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for complex adhesive, mechanical or section fastening according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated in any ONE of adhesive, thermal, mechanical or section sewing. For each process set up (including replacing adhesive, thread, wire) TWO complex jobs using different sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product.

Depending on the configuration of equipment and types of jobs, virtually any other converting and finishing set up unit can be assessed at the same time.

ICPCF362B**Produce complex adhesive, mechanical or sewn fastened product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce complex adhesive, mechanical or sewn fastened product. Some equipment may also involve cutting, trimming, folding and / or gathering (collating) which may be assessed at the same time.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults, and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain operation of sheet / section transportation system | <ul style="list-style-type: none"> 1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding to machine 1.2 Sheet / section pick-up and transport system is monitored and adjusted to ensure accurate and continuous sheet handling and efficient operation 1.3 Sheet / section transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 1.4 Substrate is added to the process according to job specifications |
| 2. Maintain operation of sheet / section delivery system | <ul style="list-style-type: none"> 2.1 Delivery system is monitored and adjusted to ensure quality and efficient product delivery 2.2 Wire straightness, length, cut-off and clinching pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample 2.3 Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample 2.4 Thread tension and stitch quality are monitored and adjusted to ensure quality of product meets standard of the approved sample |

- | | |
|---|--|
| 3. Maintain production process | <ul style="list-style-type: none"> 3.1 In-line printing / converting / binding / finishing processes are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 3.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 3.4 Manual and / or automatic control is used according to job specifications 3.5 Performance is monitored and verified using the process control system according to enterprise procedures 3.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 3.7 Waste is sorted according to enterprise procedures |
| 4. Identify and rectify problems and faults | <ul style="list-style-type: none"> 4.1 Problems in sewing fastening machine are identified and reported according to enterprise procedures 4.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 4.3 Sewing fastening machine operation is checked to ensure correct operation 4.4 Process adjustments to eliminate problems are reported according to enterprise procedures 4.5 Faulty performance of equipment is identified and reported according to enterprise procedures |
| 5. Conduct shutdown of production process | <ul style="list-style-type: none"> 5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 5.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 5.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 5.5 Repair / adjustment is verified prior to resumption of operations |
| 6. Clean adhesive / mechanical / sewing fastening machine at end of run | <ul style="list-style-type: none"> 6.1 Sewing unit is disengaged and cleaned ready for next run 6.2 Mechanical fastening unit is disengaged and cleaned ready for next run 6.3 Glue system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 6.4 In-line printing / converting / binding / finishing units are cleaned ready for next run 6.5 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 6.6 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when monitoring and verifying performance using process control systems
- Planning and organising when conducting a sample run
- Teamwork when following the correct shutdown sequence
- Using technology when adjusting machinery to improve performance
- Problem solving when identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Sheet transportation and delivery system

- What OHS factors must be considered when operating sheet-fed transportation and delivery systems?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What parts of the sheet pick-up system are to be adjusted to ensure accurate and continuous sheet feeding?
- What areas of the delivery system should be observed to maintain tension?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?

Complex fastening processes

- What OHS factors must be considered when maintaining or adjusting the operation of the machine?
- What OHS factors must be considered when using hot melt adhesive?
- What safety clothing is available for use when operating adhesive binders?
- What determines the speed of production?
- Name FOUR sectors to observe to guarantee that the production process is trouble-free and continuous.

In-line processes

- What areas of the in-line process should be monitored to assure the quality of the product?

Machine problems and faults

- When would the machine need to be adjusted?
- When would the machine need to be slowed down?
- When can machine speed be increased?
- On an adhesive binder how is adhesive application adjusted?
- On an adhesive binder how can more spine milling be achieved?
- On a wire stitcher how is the wire length adjusted?
- On a wire stitcher how can the wire be straightened in the wire feed?
- On a high frequency welder when should dwell time be increased / decreased?

- On a high frequency welder when should current be increased / decreased?

Machine shutdown and cleaning

- What OHS factors must be considered when cleaning hot melt from the machine?
- What needs to be checked when shutting down a given machine?
- Give FOUR important reasons for a thorough shutdown of operations.
- What areas of the machine needs regular cleaning?
- What materials need to be cleaned from the machine?
- What are the recommended cleaning agents?
- How can the machine be kept clear of surface rust (condensation)?

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What quality aspects should be considered in a completed adhesive bound job?
- What quality aspects should be considered in a completed high frequency welded job?
- What quality aspects should be considered in a completed wire stitched job?
- What steps should be taken to ensure that important features of the production control system are followed?
- In what way might production need to be altered to meet client requirements?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Fastening process

- Adhesive fastening such as cold and hot melt gluing, taping of substrates of varied form, weight or shape, eg hard case making, casing in, spine lining
- Mechanical fastening such as wire stitching, loop stitching of substrates of varied form, weight or shape
- Section sewing

Fastening units

- A range of machines with manual, semi-automated, fully automated or computerised process control

In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate delivery	<ul style="list-style-type: none"> • Large or small sheet / section handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a complex fastened product that meets job specifications, production timeframes and quality standards
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated in any ONE of adhesive, mechanical or section sewing. For each process produce TWO complex jobs using different sizes and weights of substrate according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must take place in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF369B**Unit Descriptor****Set up and produce hand-made box**

This unit describes the performance outcomes, skills and knowledge required to make boxes by hand.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up and produce a hand-made box. It applies to the binding and finishing sector not the carton sector of the industry. Carton sample making is covered in ICPPP281B Design basic carton and ICPPP481B Design complex carton.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|---|
| 1. Determine dimensions and style of box | 1.1 Options for style and cost are discussed with client
1.2 Dimensions of article to be contained are determined through measurement and / or job specifications
1.3 Final job specifications are determined and confirmed with the client |
| 2. Select materials | 2.1 Board weight, covering and lining materials are selected according to job specifications
2.2 Grain direction is determined if relevant |
| 3. Cut board, cover material and lining to size | 3.1 Board, cover material and lining are cut to correct size
3.2 Board is scored to appropriate depth if necessary
3.3 Waste is removed if applicable
3.4 Lids are fitted if necessary to allow for the thickness of covering material |
| 4. Fold and score corners (OR Element 5) | 4.1 Straight folds are made with corners at correct angles
4.2 Corners are secured with reinforcing material if necessary |
| 5. Glue and butt join (OR Element 4) | 5.1 Walls are set at correct angles to base
5.2 Flush joins are made with adequate adhesion |
| 6. Attach covering material and lining | 6.1 Corners are cut correctly according to job specifications
6.2 Covering material and lining are fixed with adequate and smooth adhesion
6.3 Material is rubbed smoothly into corners of box |
| 7. Press box if necessary | 7.1 Block for pressing is made up as required
7.2 Even pressure is applied to box sections |
| 8. Decorate or furnish box if required | 8.1 Appropriate decorating techniques are used where relevant
8.2 Appropriate furnishings (clasps, hinges) are attached if required |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to using tools and operating equipment
- Communication skills when discussing options and styles with the client
- Planning and organising when determining the final job specifications and selecting materials
- Teamwork when maintaining the production process in association with others
- Using technology when cutting the board, cover material and lining to size
- Problem solving when selecting board weight, covering and lining to meet job specifications

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS

- What OHS concerns are there when making boxes?

Materials

- How do you determine the necessary board calliper for a box?
- What is the maximum calliper for a folded box?
- How can corner reinforcements be made inconspicuous?
- How do you determine appropriate covering material and style?

Box styles and purposes

- How do you determine what style of box is appropriate?
- What would be the recommended allowances in a book box?
- In slip cases, what techniques can be used to reduce scuffing of a book cover?

Corner cutting techniques

- What can be done to reduce corner bulk when using heavyweight board?
- What techniques can be used when cutting the turn-ins for a rounded spine?
- When would you need to cover the edge of a board before attaching the main covering?

Adhesives

- What is the consequence of adhesives that are too thick or too thin?
- How does the open time of an adhesive affect the covering process?

Quality assurance

- What criteria are used to evaluate a finished box?
- How do you ensure a clean finished job?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Types of boxes	<ul style="list-style-type: none"> Range of boxes including loose lid, hinged lid, drop front, clamshell, book box, cruciform box, slip case, solander box
Materials	<ul style="list-style-type: none"> Range of materials including board, paper, bookcloth, buckram
Degree of autonomy	<ul style="list-style-type: none"> Working independently

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up and produce a hand-made box according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Produce TWO boxes in different styles and materials, at least ONE of which must have a lid, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF371B

Unit Descriptor

Decorate paper

This unit describes the performance outcomes, skills and knowledge required to use a range of paper and edge decorating techniques.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up and use a range of paper and edge decorating techniques including marbling, gilding, gauffering, staining, sprinkling, spraying, burnishing and paste paper.

Unit Sector

Converting, Binding and Finishing

ELEMENT

PERFORMANCE CRITERIA

- | | |
|----------------------------|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Surface to be decorated is prepared 1.2 Edges are trimmed, scraped and sanded as appropriate to the technique being used 1.3 Appropriate size, mordant or glair is prepared and applied |
| 2. Carry out marbling | <ul style="list-style-type: none"> 2.1 Bath is prepared with gum or water as appropriate to technique being used 2.2 Equipment is selected and set up according to job specifications 2.3 Colours are mixed to correct consistency for required spread 2.4 Books are tied up if edges are to be marbled 2.5 Bath is prepared according to job specifications 2.6 Substrate is correctly dipped and removed then rinsed and dried |
| 3. Gild edges with leaf | <ul style="list-style-type: none"> 3.1 Book is loaded into laying press 3.2 Red bole or black lead (graphite) is correctly applied and treated 3.3 Gold and glair are correctly applied and burnished |
| 4. Gild edges mechanically | <ul style="list-style-type: none"> 4.1 Substrate is loaded into press 4.2 Substrate is prepared according to technical requirements 4.3 Gilding machine is set up with appropriate pressure, heat and dwell time 4.4 Gilding foil is applied to substrate using the correct technique 4.5 Appropriate additives are used if foil fails to take |
| 5. Carry out gauffering | <ul style="list-style-type: none"> 5.1 Design to be transferred is drawn up using the correct technique 5.2 Tools are selected and prepared 5.3 Book is locked into laying press 5.4 Impressions are made ensuring even result |

- | | |
|---|--|
| 6. Carry out staining or sprinkling or spraying | 6.1 Books or papers are positioned and clamped or weighted
6.2 Colour is prepared according to job specifications
6.3 Colour is applied with sponge, spray gun, roller or sprinkling brush as appropriate ensuring even application and adequate time to dry |
| 7. Apply graphite | 7.1 Book is locked into laying press
7.2 Graphite powder is applied using the correct technique
7.3 Edges are burnished to required effect |
| 8. Carry out burnishing | 8.1 Book is locked into laying press
8.2 Bloodstone or agate tools are selected as appropriate
8.3 Beeswax is supplied in fine film or worked through waxed paper
8.4 Edges of book are burnished using appropriate pressure |
| 9. Make paste paper | 9.1 Paste is prepared to correct consistency and colour
9.2 Required patterns are created using brushes, combs, dies or pulling off |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to using tools and operating equipment
- Communication skills when confirming job specifications
- Planning and organising when preparing the appropriate materials for the chosen technique
- Teamwork when maintaining the production process in association with others
- Using technology when applying colour with the relevant tools
- Problem solving by using additives if foils do not take

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS

- What OHS concerns are there in the various methods of paper decoration?

Surface preparation

- How do you determine which size / mordant / glair to use for a particular process and its appropriate strength?
- List TWO methods of application and describe where each is used.
- How long before treatment should the surface be prepared (give TWO examples)?
- Why is it important that substrate should be free of dust?

Marbling techniques and materials

- List THREE different gums that can be used in the bath.
- How do you determine correct consistency of the bath?
- Describe the techniques used to produce FIVE different patterns or effects.
- What are likely causes of blank spots on the substrate?
- How do you control the spread of colour?
- How does temperature affect the marbling process?

Gilding techniques and materials

- List THREE reasons for gold not sticking.
- How would you repair a break in a gilt edge?
- List TWO methods of picking up gold leaf for edge gilding.
- What technique is used for gilding in the round?
- How does antique gilding differ from a solid gilt edge?
- Why are red bole or black lead used with the gold?

Gaufering techniques and materials

- What technique is used to obtain an even impression?
- What is the consequence of inappropriate pressure?

Staining and sprinkling and spraying techniques and materials

- How do you ensure that you have an even finish?
- How can you minimise colour absorption in absorbent stocks?
- What methods can be used to prevent colour appearing on an adjacent edge?

Graphite techniques and materials

- How do you determine correct consistency of graphite / paste mixture?
- How do you ensure an even coating?

Burnishing techniques and materials

- What is the most common fault with burnished edges?
- What steps can be taken to ensure a smooth result?

Paste paper techniques and materials

- How do you determine the correct consistency for paste?
- How do you ensure colour fastness?
- Describe the techniques used to produce FOUR different patterns.

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Types of decoration	• Includes marbling, edge gilding, gauffering, staining and sprinkling, graphite, burnishing, paste paper
Location of decoration	• Includes edges, fore edges (flat and round) and paper surfaces
Degree of autonomy	• Working independently

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly decorate paper using a range of techniques according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated in TWO processes of which ONE must be marbling or gilding OR any THREE processes. For each process produce TWO jobs (if possible using different sizes, styles and substrates), according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF381B**Unit Descriptor****Set up machine for complex laminating**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for a range of complex laminating processes including laminating reel to reel, sheet to reel and reel to sheet.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for a range of complex laminating processes.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage |
| 2. Set up reel transportation system | <ul style="list-style-type: none"> 2.1 Unwind reel is set up and adjusted according to job specifications 2.2 Webbing procedures are carried out 2.3 Web control system is set up and adjusted according to job specifications 2.4 Reels are spliced / joined according to job specifications 2.5 Rewind reel is set up and adjusted according to job specifications 2.6 Sheeter is set up and adjusted according to job specifications |
| 3. Set up machine for complex laminating | <ul style="list-style-type: none"> 3.1 Application system cylinder is set up and adjusted according to job specifications 3.2 Adhesive application system is set up and adjusted according to job specifications 3.3 Binding pressures are set up and adjusted according to job specifications 3.4 Drying system is set up and adjusted according to job specifications |
| 4. Set up in-line unit(s) | <ul style="list-style-type: none"> 4.1 Minor in-line printing / converting / binding unit(s) are set up for basic process(es) and adjusted according to machine requirements and job specifications 4.2 Assistance is given in set up of major in-line printing / converting / binding unit(s). (NOTE: if entire set up is completed, refer to appropriate competency standards) |

- 5. Conduct sample run
 - 5.1 Raw material to be used for sample is organised correctly
 - 5.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 5.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 5.4 Results are interpreted to determine adjustment requirements
 - 5.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when organising laboratory testing of a sample
- Planning and organising when conducting a sample run
- Teamwork when assisting with the set up of major in-line units
- Using technology when adjusting the sheeter according to the job specifications
- Problem solving when interpreting test results and determining adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning laminating requirements would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What elements must be considered when planning a laminating sample?

Reel transport and delivery systems

- What OHS areas must be addressed when setting up these areas of the machine?
- List THREE webbing procedures commonly used in the transportation area.
- List THREE areas to consider when setting up the web control system.
- Explain THREE problem areas likely to be encountered setting up the sheeter.
- List TWO methods of splicing a web on the laminating process.

Laminating machine set up

- What OHS areas must be addressed when setting up the laminating machine?
- What needs to be checked when setting up (and adjusting) the application system cylinder?
- What needs to be checked when setting up (and adjusting) the adhesive application system?
- What factors determine the setting of the binding pressures?
- What important matters are to be examined when setting the drying system?
- What is the largest / smallest size sheet that can be processed on this machine?
- In what ways can the machine be adapted to facilitate smaller / larger stock?

In-line processes

- What OHS areas must be addressed when setting up these areas of the machine?
- What in-line units are available for the laminating process?

Checking and adjustment

- What OHS factors should be considered before readjusting the machine?
- Under what circumstances would the machine need to be adjusted?
- What quality aspects should be considered in a completed laminating job?
- What steps should be taken to ensure that important features of the production control system are addressed?

- List FOUR items to be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Adhesives	<ul style="list-style-type: none"> • Range of one or two component adhesives used in complex laminating
Laminating process	<ul style="list-style-type: none"> • Moisture, chemical and thermal cured, and extrusion process
Laminating units	<ul style="list-style-type: none"> • Range of manual, semi-automated, fully automated and computerised process control
In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of absorbent and non-absorbent, transparent and non-transparent substrates within the major categories of paper, plastics and metals
Substrate delivery	<ul style="list-style-type: none"> • Wide and narrow reel handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for a range of complex laminating processes within production timeframes . At least one machine used must be fully automated
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on any TWO of moisture, chemical and extrusion laminating. For each process set up a laminating machine (2 or more ply) to complete TWO jobs on different substrates and of different sizes (large / small formats including one in-line process) while demonstrating splicing techniques in minimum time according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product.

ICPCF382B**Unit Descriptor****Produce complex laminated product**

This unit describes the performance outcomes, skills and knowledge required to produce complex laminated product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to monitor and adjust machinery, maintain transportation of the substrate, identify and rectify faults and correctly clean and shut down equipment.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain operation of reel transportation system on web-fed machine | 1.1 Reel stand is monitored and adjusted to ensure efficient continuous operation
1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation
1.3 Substrate is added to the process according to job specifications |
| 2. Maintain operation of reel delivery system on web-fed machine | 2.1 Reel rewind section is monitored and adjusted to maintain correct tension and to ensure no marks, blemishes or damage to finished product
2.2 Substrate is removed from the process according to job specifications
2.3 Sheeting section is monitored and adjusted to ensure quality and efficient product delivery |
| 3. Maintain complex laminating process | 3.1 Registration of laminating is monitored and adjusted to ensure quality of product meets the standard of the approved sample
3.2 Pressures are monitored and adjusted to ensure quality of product meets the standard of the approved sample
3.3 Adhesion is monitored and adjusted to ensure quality of product meets the standard of the approved sample |

- | | |
|---|--|
| 4. Maintain production processes | <ul style="list-style-type: none"> 4.1 In-line printing / coating / converting / binding / finishing process(es) are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 4.2 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.3 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 4.4 Manual and / or automatic control is used according to job specifications 4.5 Performance is monitored and verified using the process control system according to enterprise procedures 4.6 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.7 Process adjustments to eliminate problems are reported according to enterprise procedures 4.8 Faulty performance of equipment is identified and reported according to enterprise procedures 4.9 Waste is sorted according to enterprise procedures |
| 5. Identify and rectify machine operating problem | <ul style="list-style-type: none"> 5.1 Problems in laminating machine are identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 5.3 Laminating machine operation is checked to ensure correct operation |
| 6. Conduct shutdown of production process | <ul style="list-style-type: none"> 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.5 Repair / adjustment is verified prior to resumption of operations |
| 7. Clean laminating machine at end of run | <ul style="list-style-type: none"> 7.1 Laminating machine is disengaged and cleaned ready for next run 7.2 Adhesive system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures 7.3 In-line printing / coating / converting / binding / finishing units are cleaned ready for next run 7.4 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 7.5 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- Communication skills when monitoring and verifying performance using process control systems
- Planning and organising when following the correct shutdown sequence
- Teamwork when conducting the shutdown with fellow workers
- Using technology when adjusting machinery to improve performance and ensuring correct and continuous feeding and delivery of substrate
- Problem solving when identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel transportation and delivery systems

- What OHS factors must be considered when operating web machine transport and delivery systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?
- What area of the web control system should be adjusted to maintain correct positioning of the web?
- What areas of the delivery system should be observed to maintain tension?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?

Complex laminating processes

- What OHS factors must be considered when maintaining the laminating process?
- How is registration of laminating assured?
- How is any adjustment achieved?
- How can the pressure be adjusted during production?
- What areas of production must be monitored to ensure trouble-free operations?

In-line processes

- What OHS factors must be considered when maintaining the complex in-line processes?
- What areas of the in-line processes should be monitored to ensure a quality product?

Machine problems and faults

- List FOUR laminating problems that may occur during the operation of the machine.
- What adjustments or correction procedures may need to be made to ensure accurate operation of the process?

Machine shutdown and cleaning

- What OHS factors must be considered when shutting down and cleaning the machine?
- What needs to be checked when correctly shutting down the machine?
- What areas of the machine need regular cleaning?

- What materials need to be cleaned from the machine?
- How can the machine be kept clear of surface rust (condensation)?
- What are the recommended cleaning agents?

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What quality aspects should be considered in a completed laminated job?
- What steps should be taken to ensure that important features of the production control system are followed?
- In what way might production need to be altered to meet client requirements?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Adhesives	<ul style="list-style-type: none"> • Range of one or two component adhesives used in complex laminating
Laminating process	<ul style="list-style-type: none"> • Moisture, chemical and thermal cured, and extrusion process • Thermal fastening such as high frequency and head welding
Laminating units	<ul style="list-style-type: none"> • Range of manual, semi-automated, fully automated and computerised process control
In-line process	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of absorbent, non-absorbent, transparent and non-transparent substrates within the major categories of paper, plastics and metals

- | | |
|--------------------|---|
| Substrate delivery | • Wide and narrow reel handling systems |
| Degree of autonomy | • Working under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce complex laminated product that meets job specifications, production timeframes and quality standards. At least one machine used must be fully automated
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Competency must be demonstrated on any TWO of moisture, chemical and extrusion laminating. For each process operate a laminating machine (2 or more ply) to complete TWO jobs on different substrates and of different sizes (large / small formats including one in-line process) while demonstrating splicing techniques in minimum time according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Assessment off the job must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF391B**Use electronic monitoring systems
(converting and finishing)****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to use electronic monitoring systems for glue lines used in the container and carton sector of the industry and for gatherers and folders used in the binding and finishing sector.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to use electronic monitoring systems for glue lines, gatherers and folders.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Set up electronic monitoring system | <ul style="list-style-type: none"> 1.1 Parameters are set according to job type and specifications and enterprise procedures 1.2 Monitor is positioned according to job type and specifications 1.3 Ejection system is positioned according to job type and specifications, where relevant 1.4 Marking system is positioned according to job type and specifications, where relevant 1.5 "Learn" function is started to identify sheets and signatures, where relevant |
| 2. Run job and monitor production | <ul style="list-style-type: none"> 2.1 Glue line registration and glue application is monitored to ensure product conforms to job specifications 2.2 Machine is adjusted if the number of rejects exceeds specified limits 2.3 Reasons for stoppages are identified and corrected 2.4 Initial set up parameters are monitored and reviewed to ensure smooth production of quality product |
| 3. Review production data | <ul style="list-style-type: none"> 3.1 Production rejects are monitored and causes are identified 3.2 Overall data is reviewed at the end of the product run 3.3 Information on production documentation is recorded as required |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to setting up and operating electronic monitoring systems
- Communication skills when recording information on production documents
- Planning and organising when positioning the monitor according to job type
- Teamwork when maintaining the production process in association with other staff
- Using technology when setting up the electronic monitoring system
- Problem solving when identifying reasons for rejects during production

Required knowledge:

The following knowledge must be assessed as part of this unit:

Safety and OHS

- What OHS factors need to be considered when setting up and operating electronic monitoring systems?

Monitoring the gluing process

- Why is the distance between cartons on the machine important for production and for the operation of the electronic monitoring system?
- How often should the ejector (or marker) be checked for correct operation?

Gluing requirements for different carton types and substrates

- How do different carton types and substrates affect the amount and position of glue required?
- How much glue is required for TWO different carton types?
- What is the result of too much or too little glue?
- What is the result of an incorrectly positioned glue line?

Faults and problem solving

- Describe the process for fixing too much and too little glue.
- Describe the process for adjusting the position of the glue line with respect to the length of the glue flap.
- What other machine faults are registered on the EMS?
- What other parts of the folding / gluing system will cause monitoring system to reject product?
- How do you ensure that the EMS is ejecting / marking only faulty cartons?
- What parts of the machine need to be adjusted if reject cartons are not correctly identified and culled?
- What faults are likely to trigger the signature or sheet monitoring system?
- What can cause THREE common faults and how can they be avoided and corrected?

Quality assurance

- What are the quality principles behind the use of electronic monitoring?
- What work procedures can be implemented to minimise faults?
- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What steps should be taken to ensure that important features of the production control system are followed?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Monitoring systems	<ul style="list-style-type: none"> • Electronic glue line monitoring systems (EMS) and monitoring systems for gatherers and folders that identify incorrect sheets or signatures. Systems may eject or mark faulty product (mainly in carton sector) or shut down production (mainly in binding and finishing)
Machines	<ul style="list-style-type: none"> • Folder / gluers, gatherers and other relevant converting and finishing machines
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision
Quality standards	<ul style="list-style-type: none"> • Should meet client requirements and enterprise and industry standards

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly use electronic monitoring systems for glue lines, gatherers and folders according to job specifications and within the production timeframe
- Set up electronic monitoring systems for TWO different jobs, preferably of different sizes and substrates, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate an ability to retrieve information from the electronic system

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- ICPCF220B Produce basic converted or finished product
- ICPCF241B Set up machine for basic single or continuous folding
- ICPCF243B Set up machine for basic collating or inserting (sheet / section)
- ICPCF261B Set up machine for basic adhesive, mechanical or thermal fastening
- ICPCF320B Produce complex converted or finished product
- ICPCF341B Set up machine for complex sequenced or multiple folding
- ICPCF343B Set up machine for complex collating or inserting (sheet / section / reel)
- ICPCF361B Set up machine for complex adhesive, mechanical or sewn fastening

ICPCF392B**Unit Descriptor****Employability Skills****Application of the Unit****Unit Sector****Produce product on window gluer**

This unit describes the performance outcomes, skills and knowledge required to produce a range of different size jobs on the window gluer.

This unit contains employability skills.

This unit requires the individual to produce a range of different size jobs on the window gluer.

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Maintain operation of transportation system | <ul style="list-style-type: none"> 1.1 Feeder is monitored and adjusted to ensure continuous and efficient feeding of cartons to the machine 1.2 Carton pick-up and transport system is monitored and adjusted to ensure accurate continuous carton handling and efficient operation 1.3 Transfer systems are monitored and adjusted to ensure correct and continuous carton handling and efficient operation |
| 2. Maintain operation of processes | <ul style="list-style-type: none"> 2.1 Delivery is monitored and adjusted to ensure quality and efficient carton delivery 2.2 Registration of gluing is monitored and adjusted to ensure quality of product meets the standard of the approved sample 2.3 Adhesion is monitored and adjusted to ensure quality meets the standard of the approved sample |
| 3. Maintain basic rotary cutting process | <ul style="list-style-type: none"> 3.1 Cutting edges and knife condition are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample |
| 4. Maintain production process | <ul style="list-style-type: none"> 4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 4.3 Performance is monitored and verified using the process control system according to enterprise procedures 4.4 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.5 Process adjustments to eliminate problems are reported according to enterprise procedures 4.6 Faulty performance of equipment is identified and reported according to enterprise procedures 4.7 Waste is sorted according to procedures |

- 5. Identify and rectify problems
 - 5.1 Problems in window gluing machine operation are identified and reported according to enterprise procedures
 - 5.2 Adjustments or corrections are carried out according to enterprise procedures
 - 5.3 Problems in film cutting and application operation are identified and rectified according to enterprise procedures

- 6. Conduct shutdown of production process
 - 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures
 - 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements
 - 6.3 Glue system is washed up ready for next run and liquid waste is disposed of according to regulatory requirements and enterprise procedures
 - 6.4 Cutting devices are checked and sharpened if needed
 - 6.5 Waste cartons are removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures
 - 6.6 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures
 - 6.7 Repair / adjustment is verified prior to resumption of operations
 - 6.8 Production records or other documentation are accurately completed where required by enterprise procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS in relation to setting up and operating electronic monitoring systems
- Communication skills when ensuring the product quality meets the required quality standard
- Planning and organising when following the correct sequence to shut down the machine
- Teamwork when maintaining the production process in association with other staff
- Using technology when monitoring and adjusting equipment for production purposes and adjusting pressures and registration
- Problem solving by identifying problems and faults and developing solutions

Required knowledge:

The following knowledge must be assessed as part of this unit:

Carton transportation and delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the feeder should be monitored to ensure trouble-free operation?

Maintaining window facing processes

- What OHS factors must be considered when using the window facer machine?
- What are THREE areas to continuously observe to ensure the smooth trouble-free operation of the machine?
- What areas of the gluing and film cutting process should be monitored to assure the quality of the product?
- How is glue application adjusted?

Faults and minor problem solving

- What OHS factors must be considered when adjusting / correcting the machine?
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if job does not coincide with sample?
- What part(s) of the machine should be adjusted if window film is cut / slit incorrectly?
- What factors cause poor glue adhesion on cartons?

Machine shutdown and cleaning

- What OHS factors must be considered as a job is completed?
- What important tasks must be performed to correctly shut down the machine?
- How should the finished work be prepared for the next process?
- What areas of the machine need regular cleaning?
- What materials need to be cleaned from the machine?

Quality assurance

- What quality aspects should be considered in a completed job?
- In what way might production need to be altered to meet client requirements?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|---------------------|--|
| Fastening processes | <ul style="list-style-type: none"> • Spot and line gluing |
| Fastening units | <ul style="list-style-type: none"> • A range of machines with manual, semi-automated, fully automated or computerised process control |
| In-line processes | <ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such |
| Degree of autonomy | <ul style="list-style-type: none"> • Working to defined procedures under limited supervision |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce a range of different size jobs on the window gluer according to job specifications and within the production timeframe
- Produce a range of different size jobs on the window gluer including 1, 2 and 3 cycle operate, and dual feed
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF393B**Unit Descriptor****Set up machine for envelope manufacture**

This unit describes the performance outcomes, skills and knowledge required to set up a machine to cut and add patches during the manufacture of envelopes.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine to cut and add patches during the manufacture of envelopes.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------------------|---|
| 1. Calibrate and adjust settings | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The correct materials are checked and available for the job 1.3 Adhesives are selected that are appropriate for the substrate, the application process and the machine 1.4 Work area is made safe and prepared for production according to safety requirements 1.5 Window cutting and patch unit settings are set according to job specifications 1.6 Measurement settings are checked thoroughly against job specifications before production is commenced 1.7 Window position and size are set to meet requirements to ensure the machine runs efficiently and safely 1.8 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 1.9 The process is monitored to maintain quality and identify opportunities for improvement |
| 2. Confirm quality | <ul style="list-style-type: none"> 2.1 A sample is produced and checked for conformance with quality standards, and adjustments made if required 2.2 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 2.3 Any machine faults are reported to appropriate responsible person 2.4 The locations of all emergency shutdown buttons and triggers are known |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when making the work area safe and preparing for production according to safety requirements
- Communication skills when reporting any machine faults to the appropriate person
- Planning and organising when checking the measurement settings against the job specifications before production is commenced
- Teamwork when maintaining the production process in association with other staff
- Using technology when operating an envelope manufacturing machine
- Problem solving when adjusting machine settings in order to maintain quality standards

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures
- The principles of envelope manufacture and setting window cutting and patching units
- Common faults associated with window cutting and patching

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Correct materials	• Glues, papers, coated and uncoated, pre-printed
Job specifications	• Job sheets, batch processing orders, job specs
Settings	• Paper tension, paper thickness, coated and non-coated materials, glue drying times, wastage allowance, substrate

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up the window cutting and patching units and produce a clean window cut with correct gum position, even level of patch size and position according to job specifications and within the production timeframe
- Demonstrate all safety devices on the machine
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time to indicate consistent performance in setting up the manufacturing process
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Envelope manufacturing equipment with window cutting and patching units

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF395B**Unit Descriptor****Set up and operate folder gluer machine**

This unit describes the performance outcomes, skills and knowledge required to set up and operate a folder gluer machine.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up and operate a folder gluer machine with minimum downtime or wastage.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------------|--|
| 1. Set up and adjust units | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The correct materials are checked and available for the job 1.3 Adhesives appropriate for the substrate, the application process and the machine are selected 1.4 Work area is made safe and ready for production according to safety requirements 1.5 Folding guides and pressing plates are set to the required dimensions for the job 1.6 The feeder, folding part, gluer, stacker, belts, vacuums and glue applicators are clean, clear and ready for use 1.7 Settings are checked against job specifications before production is commenced |
| 2. Monitor throughput | <ul style="list-style-type: none"> 2.1 Machine is run at the speed required to produce a quality product 2.2 Machine is jogged to ensure the folds and glue are in the correct position 2.3 Guide positions are monitored to ensure adhesive is applied evenly and in the correct position 2.4 Paper moisture is monitored and correct moisture levels are maintained 2.5 Blank spacing is controlled and product spacing and flow are maintained for efficient operation 2.6 Folds are correctly placed and the product stacks correctly 2.7 Glues dry at correct rates for the substrate |

- | | |
|------------------------------|--|
| 3. Confirm quality of output | 3.1 A sample from the machine is selected and checked to ensure it conforms to the required quality standards |
| | 3.2 Adjustments are made when the standards are not met |
| | 3.3 Each process is monitored and minor adjustments are made during production, if required |
| | 3.4 Samples are continuously monitored for defects and defects are removed |
| | 3.5 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved |
| | 3.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards |
| | 3.7 The locations of all emergency shutdown buttons and triggers are known |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when making the work area safe and preparing for production according to safety requirements
- Communication skills when checking and confirming job specifications
- Basic literacy to read work instructions
- Planning and organising when monitoring wastage and correctly disposing of it according to enterprise quality standards
- Teamwork when maintaining the production process in association with other staff
- Using technology when operating a folder gluer machine
- Problem solving when monitoring and correcting paper moisture levels and continuously monitoring samples for defects and removing them as required

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with folder gluer machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|-------------------|--|
| Correct materials | <ul style="list-style-type: none"> • Glues, papers, coated and uncoated, pre-printed, printed or die-cut board, single and double wall corrugated board |
|-------------------|--|

- | | |
|--------------------|--|
| Job specifications | • Job sheets, batch processing orders, job specs |
| Jogged | • Inched, moved slowly through the process |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up and operate a folder gluer machine according to job specifications and within the production timeframe
- The individual is able to set up and operate a folder gluer machine with minimum downtime or wastage
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to a folder gluer machine

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF396B**Set up in-line scoring, folding and gluing machine for envelope manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up in-line scoring, folding and gluing machines used in the manufacture of envelopes.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up in-line scoring, folding and gluing machines.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|------------------------------|--|
| 1. Set up and adjust units | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The correct materials are checked and available for the job 1.3 Appropriate adhesives for the substrate, the application process and the machine are selected 1.4 Work area is made safe and ready for production according to safety requirements 1.5 Blades are sharp and fitted as necessary, with units calibrated according to job specifications 1.6 Settings are checked against job specifications before production is commenced 1.7 Adhesives are positioned correctly and applied evenly |
| 2. Confirm quality of output | <ul style="list-style-type: none"> 2.1 A sample from the machine is selected and checked to ensure it conforms to the required quality standards 2.2 Adjustments are made when the standards are not met 2.3 Each in-line process is monitored and minor adjustments made during production as required 2.4 Samples are continuously monitored for defects and removed where relevant 2.5 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 2.6 Wastage is monitored, kept to a minimum and correctly disposed of according to enterprise quality standards 2.7 The locations of all emergency shutdown buttons and triggers are known |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following knowledge must be assessed as part of this unit:

- Common faults associated with in-line scoring, folding and gluing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

Required knowledge:

The following skills must be assessed as part of this unit:

- OHS when making the work area safe and preparing for production according to safety requirements
- Communication skills when checking and confirming job specifications
- Basic literacy to read work instructions
- Planning and organising when monitoring wastage and correctly disposing of it according to enterprise quality standards
- Teamwork when maintaining the production process in association with other staff
- Using technology when operating in-line scoring, folding and gluing machines
- Problem solving when monitoring each in-line process and making adjustments as required during production

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|---|
| Correct materials | • Glues, papers, coated and uncoated, pre-printed |
| Job specifications | • Job sheets, batch processing orders, job specs |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up machinery and produce scoring, folding and gumming that meets job specifications for envelope dimensions, envelope squareness, flap dimensions, throat size, gum position, gum level and gum evenness according to job specifications and within the production timeframe
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of assessment methods to indicate consistent performance in in-line scoring, folding and gluing envelopes
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to in-line scoring, folding, and gluing machines used in the manufacture of envelopes

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF398B**Set up in-line bottom making machine for sack or bag manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up in-line bottom making machines for the manufacture of sacks or bags.

Employability Skills

This unit contains employability skills.

Prerequisite Unit(s)

ICPCF298B Run and monitor sack and bag machines

Application of the Unit

This unit requires the individual to set up in-line bottom making machines for the manufacture of sacks or bags with minimum downtime.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|----------------------------|--|
| 1. Set up and adjust units | <ul style="list-style-type: none"> 1.1 Job specifications are obtained and read and tools and transfer segments are available for set up 1.2 Draw rollers and nip rollers and transfer segments are positioned correctly and pressures calibrated with timing set 1.3 Gears are changed and correctly set up 1.4 Knife assembly for guillotining and serration measurements are set and accurate timing assigned 1.5 Pre-creaser blades are positioned in relation to one another and angular timing fixed 1.6 Centre grippers are correct in size, pressures and positioning 1.7 Vacuum holes are correctly positioned and opening cylinder is set up and timed 1.8 Bottom forming guides and bottom paste unit are set up 1.9 Bottom closing and patch units are calibrated 1.10 Delivery chute and bag counter are prepared and ready |
| 2. Set up in-line units | <ul style="list-style-type: none"> 2.1 Correct perforation unit or perforation impression roller is set up 2.2 Pick-up rollers are installed and pressure and time are fixed 2.3 Tucking position, timing and depth are correctly set 2.4 Glue patch applicator or glue impression roller is set up according to job specifications 2.5 Press roller is positioned and pressured and timing is programmed 2.6 Doctor blades and hot melt unit are set up 2.7 Timing between all units is checked for conformance with job specifications 2.8 Gears are changed according to job specifications 2.9 The settings and tensions of the raw material unwind and brake assembly are correct according to job specifications |

- | | | | |
|----|---------------------------------|-----|---|
| 3. | Check availability of materials | 3.1 | Cut tubes are available and stacked ready |
| | | 3.2 | Adhesives are appropriate for the substrate, the application process and the machine |
| | | 3.3 | Correct procedures for the control of materials are followed |
| 4. | Check set up | 4.1 | Work area is safe and ready for production according to safety requirements |
| | | 4.2 | All details required for the job are checked again and confirmed against job specifications |
| | | 4.3 | Settings are checked against specifications before production is commenced |
| | | 4.4 | Machine is stepped to ensure the scores and folds are in the correct position and paper tension is corrected / adjusted |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when making the work area safe and preparing for production according to safety requirements
- Communication skills when checking and confirming all details required for the job against the job specifications
- Planning and organising when correctly positioning draw rollers, nip rollers and transfer segments, and calibrating pressures with a timing set
- Teamwork when maintaining the production process in association with other staff
- Using technology when using an in-line bottom making machine for the manufacture of sacks or bags
- Problem solving when stepping the machine to ensure the scores and folds are in the correct position and the paper tension is correct

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with setting up in-line scoring, folding and gluing machines, what causes them and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|-------------------|---|
| Correct materials | • Glues, papers, coated and uncoated, pre-printed |
|-------------------|---|

Job specifications	<ul style="list-style-type: none"> • Job sheets, batch processing orders, job specs
Stepped	<ul style="list-style-type: none"> • Inched, jogged, moved slowly through the process
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up in-line bottom making machines for the manufacture of sacks or bags with minimum downtime
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to scoring, folding, and gluing machinery used in the manufacture of sacks and bags

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF399B**Set up in-line tube making machine for sack or bag manufacture****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up in-line tube making machines for the manufacture of sacks or bags.

Employability Skills

This unit contains employability skills.

Prerequisite Unit(s)

ICPCF298B Run and monitor sack and bag machines

Application of the Unit

This unit requires the individual to set up in-line tube making machines for the manufacture of sacks or bags with minimum downtime.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|---|
| 1. Set up and adjust units | <ul style="list-style-type: none"> 1.1 Job specifications are obtained and read and tools are available for set up 1.2 Draw rollers are positioned correctly and pressures calibrated 1.3 Gears are changed and correctly set up 1.4 Knife assembly for guillotining and serration measurements are set and accurate timing assigned 1.5 Nip roller position, timing and pressures are set 1.6 Pre-creaser blades are positioned in relation to one another and angular timing fixed 1.7 Centre grippers are correct in size, pressures and positioning 1.8 Vacuum holes are correctly positioned and timed |
| 2. Prepare materials for manufacturing process | <ul style="list-style-type: none"> 2.1 Substrate reels are positioned in correct unwind direction and in the correct order and web position, tension and web aligner are set up 2.2 Reels are loaded according to OHS requirements, manufacturer's specifications and enterprise procedures 2.3 Adhesives are appropriate for the substrate, the application process and the machine 2.4 Correct procedures for the control of materials are followed |
| 3. Check set up | <ul style="list-style-type: none"> 3.1 Work area is safe and ready for production according to safety requirements 3.2 All details required for the job are checked again and confirmed against job specifications 3.3 Settings are checked against specifications before production is commenced 3.4 Machine is stepped to ensure the scores and folds are in the correct position and paper tension is corrected / adjusted |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when checking and confirming all details required for the job against the job specifications
- Planning and organising when checking settings against job specifications before production is commenced
- Teamwork when maintaining the production process in association with other staff
- Applying mathematical ideas and techniques when ensuring the centre grippers are correct in size and positioning
- Using technology when using an in-line tube making machine for the manufacture of sacks or bags
- Problem solving when stepping the machine to ensure the scores and folds are in the correct position and the paper tension correct

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Common faults associated with setting up in-line scoring, folding and gluing machines, what causes faults and how to correct them
- Enterprise documentation procedures
- Enterprise quality standards
- Enterprise faults procedures

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Correct materials	• Glues, papers, coated and uncoated, pre-printed
Job specifications	• Job sheets, batch processing orders, job specs
Stepped	• Inched, jogged, moved slowly through the process
Substrate types	• Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up in-line tube making machines for the manufacture of sacks or bags with minimum downtime
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- Access to in-line scoring, folding, and gluing machinery used in the manufacture of sacks and bags

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF406B**Unit Descriptor****Employability Skills****Application of the Unit****Set up and load in-line smart card machine**

This unit describes the performance outcomes, skills and knowledge required to set up and load an in-line smart card machine.

This unit contains employability skills.

This unit requires the individual to set up a smart card machine to produce cards. The individual will set and adjust the machine and load it in preparation for production.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|---|
| 1. Set and adjust sections of the machine | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed according to job specifications 1.2 The correct materials are checked and available for the job 1.3 All light sensors and proximity sensors are operating 1.4 Mills are set to the right cavity depth for the chips 1.5 Tape indexer and die are cleaned and the chip registration is correct 1.6 The implanting module is set up and registered and adhesives are available and dispenser is clean and ready 1.7 Machine and in-line components are initialised |
| 2. Confirm computer settings | <ul style="list-style-type: none"> 2.1 Encoder settings are correct and conform to job specifications 2.2 Tester settings are correct and conform to job specifications 2.3 Setting on the computer that controls entire machine is correctly set |
| 3. Set up printer unit | <ul style="list-style-type: none"> 3.1 Print head is set up and adjusted according to job specifications 3.2 Ink and solvent levels are checked and refilled if necessary 3.3 Settings are selected according to job specifications 3.4 Drying is checked as sufficient to key ink to the substrate 3.5 Printer is set up according to OHS guidelines |
| 4. Load machine | <ul style="list-style-type: none"> 4.1 Substrate is prepared according to job specifications 4.2 Substrate is positioned correctly to the machine 4.3 Faulty material is visually identified and removed according to OHS requirements and enterprise procedures 4.4 Cards are loaded according to OHS requirements and manufacturer's specifications and enterprise procedures 4.5 Settings are checked according to job specifications before production is commenced 4.6 Work area is safe and ready for production according to safety requirements |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when recording details of production wastage
- Planning and organising when coding and checking chips before operating the printer unit
- Teamwork when maintaining the production process in association with other staff
- Applying mathematical ideas and techniques when entering job specifications and machine settings through computer consoles
- Using technology when setting up a smart card machine
- Problem solving by visually identifying faulty material, removing it and identifying details of any cards needing to be remade and entering them into the computer console

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Production quality requirements
- Waste disposal procedures
- Smart card technology
- Correct material handling procedures
- Principles of printing and ink usage

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Correct materials	Inks, plastic cards, chips, glue, coated and uncoated, pre-printed
Job specifications	Job sheets, batch processing orders, job specs

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up and adjust an in-line smart card machine and load it in preparation for production
- Demonstrate all safety devices on the machine
- For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- A smart card printing and encoding machine

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF407B**Operate a smart card machine and pack product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to operate a smart card machine and pack product.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to operate a smart card machine and produce cards. The individual will monitor production for problems and to ensure quality. The operator will correctly pack cards at the end of the process and clear the machine of materials and wastage.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|-------------------------------|---|
| 1. Monitor production process | <ul style="list-style-type: none"> 1.1 All details required for the job are checked and confirmed against job specifications 1.2 The supply of materials throughout the run is maintained 1.3 Machine is run at optimum speed for maintaining quality outputs 1.4 Samples from the machine are selected and checked to ensure they conform to job specifications 1.5 Machines are adjusted to maintain quality of outputs |
| 2. Maintain quality | <ul style="list-style-type: none"> 2.1 Correct procedures for the removal of waste are followed according to enterprise procedures 2.2 Samples are continuously monitored for defects and defects are removed 2.3 The efficiency, quality and output rate of the production run are monitored for problems and any deficiencies resolved 2.4 Milled cavities are checked to ensure the right cavity depth for the chips 2.5 Die cuts are correct and meet quality standards 2.6 The correct amount of glue is applied by the dispensing station 2.7 The chips are correctly inserted into the cavity by the implanting module 2.8 Print quality meets the standards in the job specifications or sample |
| 3. Code and check chips | <ul style="list-style-type: none"> 3.1 Encoder settings are correct and conform to job specifications 3.2 Tester settings are correct and conform to job specifications 3.3 The details of any cards needing to be remade are entered into computer console |

- 4. Monitor printer unit
 - 4.1 Ink and solvent levels are monitored and filled when required and stock levels are recorded according to enterprise procedures
 - 4.2 Quality of inkjet is monitored to ensure it conforms to job specifications
 - 4.3 Chemicals are handled according to OHS requirements
 - 4.4 Drying is checked as sufficient to key ink to the substrate
- 5. Identify problems
 - 5.1 Faults that affect the quality of the cards are identified and rectified
 - 5.2 Problems that reduce the rate of output are identified and fixed
 - 5.3 Faults that affect the efficient operation of equipment are identified and resolved
- 6. Unload and pack cards
 - 6.1 Cards are unloaded according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 6.2 Reconciliation and final quality check are documented
 - 6.3 Cards are prepared (stacked, wrapped and labelled) for next process according to manufacturer's specifications and enterprise procedures
 - 6.4 Wastage is recorded and disposed of according to enterprise procedures
- 7. Shut down machine
 - 7.1 Dispensing needle is moved to the safety position and solvent is checked to ensure coverage of the needle
 - 7.2 Inkjet is cleaned and shutdown according to manufacturer's specifications
 - 7.3 The encoding computer is shut down in the correct manner to ensure no loss of data
 - 7.4 The milling vacuum is emptied and cleaned
 - 7.5 The machine and work area are cleaned according to enterprise procedures
 - 7.6 The air supply is turned off
 - 7.7 Waste chemicals are handled and disposed of according to OHS requirements

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when recording details of production wastage
- Planning and organising when coding and checking chips before operating the printer unit
- Teamwork when maintaining the production process in association with other staff
- Applying mathematical ideas and techniques when monitoring the rate of machine output
- Using technology when operating a smart card machine
- Problem solving by monitoring the efficiency, quality and output rate of the production run and resolving any problems as they arise

Required knowledge:

The following knowledge must be assessed as part of this unit:

- Operation of the card printing unit
- Operation of the card encoding unit
- Production quality requirements
- Waste disposal procedures
- Smart card technology
- Correct material handling procedures
- Principles of printing and ink usage

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

- | | |
|--------------------|---|
| Correct materials | • Inks, plastic sheets, chips, glue, coated and uncoated, pre-printed |
| Job specifications | • Job sheets, batch processing orders, job specs |

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Operate a smart card machine and produce cards according to job specifications and within the production timeframe
- Demonstrate all safety devices on the machine
- Operate a smart card machine and produce cards over two different jobs
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- A smart card printing and encoding machine

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF425B**Set up machine for complex flat-bed die cutting or embossing****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex flat-bed die cutting or embossing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for complex flat-bed die cutting or embossing.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Prepare job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked |
| 2. Prepare flat-bed die cutting or embossing devices | <ul style="list-style-type: none"> 2.1 Appropriate cutting devices or dies are selected and secured to machine according to job specifications 2.2 Cutting devices or dies are registered and proofed according to job specifications 2.3 Cutting devices or dies are correctly mounted |
| 3. Set up reel system (OR Element 4) | <ul style="list-style-type: none"> 3.1 Unwind and rewind reels are set up and adjusted according to job specifications 3.2 Webbing procedures are carried out according to job specifications 3.3 Web control system is set up and adjusted according to job specifications 3.4 Reels are spliced / joined according to job specifications |
| 4. Set up sheet system (OR Element 3) | <ul style="list-style-type: none"> 4.1 Feeder and delivery systems are set up and adjusted according to job specifications 4.2 Sheet pick-up and transportation system is set up and adjusted according to job specifications 4.3 Transfer and control systems are set up and adjusted according to job specifications 4.4 Folder and sheeter are set up and adjusted according to job specifications 4.5 Substrate is removed from process according to job specifications |
| 5. Set up machine for complex flat-bed die cutting or embossing | <ul style="list-style-type: none"> 5.1 Flat-bed cutting devices are set up and adjusted according to job specifications 5.2 Cutting pressures are set up and adjusted according to job specifications 5.3 Machine lays are set to correct position to register |

- 6. Set up in-line units
 - 6.1 Minor in-line printing / converting / binding units are set up for basic processes and adjusted according to machine requirements and job specifications
 - 6.2 Assistance is given in set up of major in-line printing / converting / binding units (NOTE: if entire set up is completed, refer to appropriate competency standards)

- 7. Conduct sample run
 - 7.1 Material to be used for sample is organised correctly
 - 7.2 Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures
 - 7.3 Sample is visually inspected and / or tested or laboratory testing is organised according to enterprise procedures
 - 7.4 Results are interpreted to determine adjustment requirements
 - 7.5 Adjustment changes are carried out according to product and machine specifications

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when setting up the machine
- Communication skills when organising a laboratory test if required
- Planning and organising when ensuring registration alignment of cutting devices or dies
- Teamwork when giving assistance with the setting up of in-line units
- Applying mathematical ideas and techniques when checking the availability of all job related components
- Using technology when selecting appropriate cutting device or dies
- Problem solving when readjusting settings based on results of sample run

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning flat-bed die cutting or embossing would you expect to find in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What factors must be considered when deciding on a cutting system?

Mounting and installing flat-bed cutting devices

- What needs to be checked when cutting devices are mounted on a flat-bed?
- Explain TWO methods each of registering and proofing the cutting devices.
- What needs to be checked when the cutting devices are secured to the machine?
- What criteria determine the selection of particular cutting devices?

Reel transportation and delivery systems

- What OHS concerns are there when setting up reel transportation systems?
- What adjustments to the unwind reel may be needed to suit various jobs?
- What are the important areas to be considered during webbing procedures?
- List and explain the adjustments available to the web.
- What needs to be checked when splicing / joining the web?
- What important areas of the reel delivery system may need to be adjusted according to job specifications?
- What steps should be taken to ensure that the delivery system operates effectively?
- When would it be necessary to make an adjustment to the sheeter during production?
- When would it be necessary to make an adjustment to the folder during production?
- When would it be necessary to make an adjustment to the rewind wheel during production?

Sheet transportation and delivery systems

- What OHS factors must be considered when setting up and / or operating sheet transport and delivery systems?
- List FOUR important areas of the feeder unit set up.
- What adjustments can be made to the machine to facilitate accurate sheet pick-up and transportation?
- What areas of the delivery system should be observed to maintain neat delivery of

finished work?

- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?
- List FOUR ways in which the finished product can be secured for dispatch.

Setting up machines for complex flat-bed die cutting or embossing

- What OHS factors must be considered when setting up cutting devices?
- What needs to be checked when setting up, adjusting and operating flat-bed cutting devices?
- How is the machine pressure determined?
- How are the machine cutting depths determined?
- Why do you adjust lays for registration and what needs to be checked when it is done?

In-line processes

- When would it be necessary to adjust in-line units?
- What areas should be checked to ensure the suitability of in-line processes?
- What is the largest / smallest size sheet that can be processed on this machine?

Checking and adjustment

- What details of the completed sample should be examined to ensure conformance with the client's requirements?
- What product testing procedures are available and how often should they be used?
- What common faults can occur with the flat-bed cutting process?
- What areas of the finished sample should be compared with the client's original copy?
- What factors indicate a need for the replacement of knives / blades / cutting edges?
- How should the cutting edges be stored to guard against damage and deterioration?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process • Flat-bed die and forme cutting and embossing

Shapes • Simple or multiple shapes

Flat-bed cutting units • A range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control

In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, date coding, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such
Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, corrugated board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up machines for complex flat-bed die cutting or embossing according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on EITHER flat-bed die cutting OR embossing. For either process set up TWO jobs changing the type and size of substrates and design of finished patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF426B**Produce complex flat-bed die cut or embossed product****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to produce complex flat-bed die cutting or embossing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit describes the skills and knowledge required for complex flat-bed die cutting or embossing.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|--|--|
| 1. Maintain operation of reel (OR Element 2) | <ul style="list-style-type: none"> 1.1 Reel stand and reel rewind section are monitored and adjusted to ensure efficient continuous operation and to maintain correct tension and to ensure no marks, blemishes or damage to finished product 1.2 Web control system is monitored and adjusted to ensure correct tension and accurate continuous positioning of the web for efficient operation 1.3 Substrate is added to and removed from the process according to job specifications |
| 2. Maintain operation of sheet transportation system on sheet-fed machine (OR Element 1) | <ul style="list-style-type: none"> 2.1 Feeder and delivery systems are monitored and adjusted to ensure continuous and efficient feeding to machine 2.2 Sheet pick-up, transport system and sheeting section are monitored and adjusted to ensure accurate and continuous sheet handling and an efficient operation and quality product 2.3 Transfer systems are monitored and adjusted to ensure correct and continuous sheet handling and efficient operation 2.4 Substrate is added to process according to job specifications |
| 3. Maintain complex flat-bed cutting process | <ul style="list-style-type: none"> 3.1 Knife condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.2 Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample 3.3 Registration of knife(s) is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.4 Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of the approved sample 3.5 In-line printing / converting / binding / finishing processes are monitored and adjusted to ensure the quality of product meets the standard of the approved sample |

- | | |
|---|---|
| 4. Maintain operation of production process | <ul style="list-style-type: none"> 4.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 4.2 Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures 4.3 Manual and / or automatic control is used according to job specifications 4.4 Performance is monitored and verified using the process control system according to enterprise procedures 4.5 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 4.6 Process adjustments to eliminate problems are reported according to enterprise procedures 4.7 Faulty performance of equipment is identified and reported according to enterprise procedures 4.8 Waste is sorted according to enterprise procedures |
| 5. Identify and rectify problems | <ul style="list-style-type: none"> 5.1 Problem in cutting (flat-bed) machine operation is identified and reported according to enterprise procedures 5.2 Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level 5.3 Cutting (flat-bed) machine operation is checked to ensure correct operation |
| 6. Conduct shutdown of production process | <ul style="list-style-type: none"> 6.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures 6.2 Shutdown is conducted in association with fellow workers and in compliance with OHS requirements 6.3 Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 6.4 Machine faults requiring repair are identified and reported to designated person according to enterprise procedures 6.5 Repair / adjustment is verified prior to resumption of operations |
| 7. Clean flat-bed cutting machine at end of run | <ul style="list-style-type: none"> 7.1 Knife and machine bed are cleaned ready for next run 7.2 Cutting devices are sharpened correctly according to OHS requirements and enterprise procedures 7.3 Cutting machine is disengaged and cleaned ready for next run 7.4 In-line printing / converting / binding / finishing units are cleaned ready for next run 7.5 Reel feed, transportation and delivery systems are disengaged and cleaned ready for next run 7.6 Sheet feed, transport and delivery systems are disengaged and cleaned ready for next run 7.7 Production records or other documentation are accurately completed where required by enterprise procedures |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when reading and interpreting job requirements from the job documentation
- Planning and organising when setting up the machine for operation
- Teamwork when confirming the sample with the supervisor
- Applying mathematical ideas and techniques when positioning the forme and counters
- Using technology by using machines
- Problem solving by interpreting results to determine adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Reel or sheet transportation systems

- What OHS factors must be considered when setting up and / or operating machine transport systems?
- What areas of the reel stand should be monitored to ensure trouble-free operation?
- What area of the web control system should be adjusted to maintain correct web tension?
- What area of the web control system should be adjusted to maintain correct positioning of the web?
- What areas of the sheet-fed feeder should be monitored to ensure trouble-free operation?
- What parts of the sheet pick-up system are to be adjusted to ensure accurate and continuous sheet handling?

Reel or sheet delivery systems

- What OHS factors must be considered when setting up and / or operating machine delivery systems?
- What areas of the delivery system should be observed to maintain tension?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?

Flat-bed cutting operations

- What OHS factors must be considered when maintaining the cutting process?
- What indicators demand the replacement of a knife?
- What needs to be checked when cutting pressure is adjusted?
- List THREE ways in which registration can be guaranteed.
- What production difficulties can be expected during production runs?

Machine problems and cutting faults

- What OHS factors must be considered when problem solving on the machine maintaining the cutting process?
- What needs to be checked when packing cutting devices?
- What needs to be checked when correcting dull cutting edges on equipment?

- What needs to be checked when correcting the depth of embossing?
- What needs to be checked when correcting out-of-square results?

Machine shutdown and cleaning

- What OHS factors must be considered when conducting machine shutdown procedures?
- What needs to be checked when waste is removed from the machine and surrounding area for disposal or recycling?
- What needs to be checked when shutting down the machine?
- What needs to be checked when the cutting devices or knives are cleaned or replaced ready for the next run?
- List the areas of the machine that require cleaning at the end of the run.

Quality assurance

- What production records need to be kept or written up?
- What information should be included in this reporting procedure?
- What quality aspects should be considered in a completed cutting job?
- What steps should be taken to ensure that important features of the production control system are followed?

Information sources

- What machine manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Cutting process	<ul style="list-style-type: none"> • Flat-bed die and forme cutting, embossing
Shapes	<ul style="list-style-type: none"> • Complex or multiple shapes
Flat-bed cutting units	<ul style="list-style-type: none"> • A range of machines with dies, cutting formes or drills and manual, semi-automated, fully automated or computerised process control
In-line processes	<ul style="list-style-type: none"> • Minor processes that are integral to this competency can include basic in-line operations such as perforating, numbering, slitting that do not in themselves constitute another defined unit of competency. Where a major in-line process is defined as a separate competency (eg flat-bed cutting, folding) it should be assessed as such

Substrate types	<ul style="list-style-type: none"> • Range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal
Substrate handling	<ul style="list-style-type: none"> • Wide or narrow reel or large or small sheet handling systems
Degree of autonomy	<ul style="list-style-type: none"> • Working under limited supervision

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Produce complex flat-bed die cut or embossed product with different substrates, sizes and patterns according to job specifications
- Demonstrate all safety devices on the machine
- Competency must be demonstrated on EITHER flat-bed die cutting OR embossing. For either process produce TWO complex jobs (including in-line processes) with different substrates, sizes and patterns according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Demonstrate use of computerised control, monitoring and data entry systems if available and appropriate
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of both of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF465B**Unit Descriptor****Set up and produce hand-bound book**

This unit describes the performance outcomes, skills and knowledge required to produce hand-bound books.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up for hand bookbinding. Some elements of this competency are also included in ICPCF467B Restore books.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|---|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Job specifications are read and interpreted from job documentation 1.2 All necessary materials are assembled according to job specifications |
| 2. Complete adhesive binding / tipping | <ul style="list-style-type: none"> 2.1 Sheets are fanned and masked every 3-4 mm 2.2 A thin even coating is applied on area of sheet designated for tipping 2.3 Correct adhesive is applied to achieve a good bond 2.4 Tipped sheet is accurately positioned |
| 3. Number book | <ul style="list-style-type: none"> 3.1 Sheets are placed in correct sequence and numbered correctly according to job specifications 3.2 Numbering machine is set for appropriate number of copies eg duplicate, triplicate 3.3 Sheets are knocked up squarely without damage |
| 4. Index book | <ul style="list-style-type: none"> 4.1 Index is spaced correctly and evenly 4.2 Durable square, clean and neat cut tabs or cut-outs are constructed 4.3 Headings are constructed legible and permanent |
| 5. Apply adhesive binding / padding by hand | <ul style="list-style-type: none"> 5.1 Product is knocked up squarely to spine and head with boards inserted between pads 5.2 Spine folds are completely removed from sections in guillotine 5.3 Adequate spine margin is preserved 5.4 Appropriate number of saw cuts are made in work 5.5 Edge of spine is roughened sufficiently to improve adhesion 5.6 Thin even application of appropriate adhesive is applied 5.7 Book is fanned before gluing (except for pads) to ensure increased surface coverage 5.8 Book is assessed after drying with thorough adhesion |
| 6. Sew sections | <ul style="list-style-type: none"> 6.1 Appropriate sewing supports are selected and spaced according to job specifications 6.2 Consistent thread tension is maintained during sewing 6.3 Sections are aligned at the head 6.4 Swelling is monitored and controlled |

- 7. Forward the book
 - 7.1 Spine is glued, rounded and backed
 - 7.2 Spine lining is attached
 - 7.3 Text block is covered (board attached)
 - 7.4 Text block is cased in

- 8. Block the book
 - 8.1 Image is blocked into required position according to job specifications

- 9. Hand finish the book
 - 9.1 Hand finish book according to job specifications
 - 9.2 Typeface size and type are appropriate
 - 9.3 Design is in keeping with the period of publication
 - 9.4 An even impression is applied

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when clarifying job specifications
- Planning and organising when assembling all the necessary materials based on the job specifications
- Teamwork when maintaining the production process in association with others
- Applying mathematical ideas and techniques when numbering sheets in the correct sequence
- Using technology when pressing the book
- Problem solving when determining the original page securing method

Required knowledge:

The following knowledge must be assessed as part of this unit:

OHS

- What OHS concerns are there when hand binding?

Adhesive binding / tipping

- Explain the term "viscosity".
- What part does grain direction play in the tipping operation?
- What is the recommended tipping width for endpapers?
- What is the recommended adhesive to be used in tipping?

Numbering

- What needs to be checked when the numbering machine is set for duplicate / triplicate numbering?
- What needs to be checked when the numbering machine is re-inked?
- Explain how a given number is set on the machine.

Indexing

- List FOUR different types of indices.
- Give THREE ways to reinforce an index.
- Explain how an index is evenly and correctly spaced down the sheet.

Adhesive binding / padding

- What adhesives are not recommended for padding?
- Explain why some adhesives are not suitable for padding.
- Explain the terms "pH", "viscosity", "open time", "tack", "specific adhesion", "molecular adhesion" and "mechanical adhesion".
- Name FOUR techniques that are available to ensure the permanent adhesion of the padded sheets.
- Name FOUR ways in which the padding operation can be accelerated.

Section sewing

- Name FOUR methods of hand sewing.
- Name FOUR important considerations to be addressed when setting up for sewing.

- Why should you use a sewing frame?
- What "cord" (calliper) thread is suitable for sewing 8pp sections?
- What needs to be checked when the sewing thread is joined during the sewing operation?
- What needs to be checked when the sewing operation is finished off?
- What would result if the sewing is too loose / too tight?

Book forwarding

- What important result must be achieved when gluing the spine of the book?
- What would result if the spine glue was too thick / too thin?
- How is a correct round in a book spine recognised?
- What problems may occur if too much round is applied to the spine?
- What problems may occur if insufficient round is applied to the spine?
- Name SIX different spine linings.
- State the reasons for spine linings.
- What special techniques are applied to 2-on 2-off spine linings?
- Give FOUR important considerations to be given to spine linings.
- In what direction should the grain be directed in spine linings?
- What would result if the grain direction in the spine lining was incorrect?
- How can a good corner be recognised?
- What is the recommended turn-in?
- List FOUR steps to ensure a clean job.
- What is "trimming-out" a case?
- What determines the correct board calliper on a book?
- What micron board is recommended on a book 5 mm thick?
- What needs to be monitored when casing-in a book?

Blocking

- Name FOUR procedures that ensure a good blocking result.
- What needs to be checked when positioning type on the spine of a book?
- What needs to be checked when positioning type on the front of a book?
- Explain the term "blind blocking".

Hand finishing

- Name FOUR methods of hand finishing a book cover.
- What criteria are used to ensure an appropriate typeface is selected?
- What criteria are used to ensure the design chosen corresponds with the era of the book?
- What considerations should be given to the hand finishing of the book?
- What can be the result of uneven impressions?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Types of equipment	<ul style="list-style-type: none"> • Range of tools, equipment and machines
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures and in consultation with other relevant persons to ensure production requirements have been met
Enterprise procedures	<ul style="list-style-type: none"> • Range of enterprise procedures within defined work area
Quality standards	<ul style="list-style-type: none"> • Should meet client requirements and enterprise and industry standards

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly set up and produce a hand-bound book according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Set up for and produce AT LEAST THREE hand-bound books that between them incorporate each of the listed Elements (pulling down and section sewing to be done on multi-section - minimum ten sections - book) and use a range of substrates, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF467B**Unit Descriptor****Restore books**

This unit describes the performance outcomes, skills and knowledge required to restore books.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up and restore a book.

Unit Sector

Converting, Binding and Finishing

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Assess physical condition of book to be rebound / restored | 1.1 Physical construction and binding style of the book are identified
1.2 Areas of damage and weakness are identified and recorded |
| 2. Identify and select treatment options | 2.1 Paper and cover cleaning options are assessed
2.2 Paper and cover repair options are assessed
2.3 Ethical / rarity / value cost alternatives are evaluated
2.4 Treatment options are discussed with owner |
| 3. Assemble materials for binding | 3.1 Materials and equipment are assembled according to job specifications
3.2 Binding equipment set up according to job specifications |
| 4. Dissect / pull down book | 4.1 Original page securing method and section structure are determined
4.2 Cover / endpapers, threads and stitches are removed with minimal damage to sections and text
4.3 Sheets and sections are cleaned with minimal damage
4.4 Dog-ears are straightened with old joints flattened
4.5 Book is pressed |
| 5. Treat paper | 5.1 Paper is cleaned using dry or wet methods as appropriate
5.2 Paper is de-acidified if necessary by most appropriate method
5.3 Paper is repaired and / or reinforced using appropriate methods
5.4 Paper is resized if required
5.5 New paper is tinted to resemble original if requested
5.6 Wire stitches or sewing threads are removed
5.7 Original adhesive is removed without damaging the book |
| 6. Resew book | 6.1 Appropriate sewing supports are selected and spaced according to job specifications
6.2 Consistent thread tension is maintained during sewing
6.3 Sections are aligned at the head
6.4 Swelling is monitored and controlled
6.5 Headbands are re-sewn if necessary |

- 7. Forward the book by hand
 - 7.1 Old spine and sides and turn-ins are lifted and reattached if rebacking is necessary
 - 7.2 Edges are knocked up into original alignment
 - 7.3 Round and back spine are glued
 - 7.4 Spine lining is attached
 - 7.5 Appropriate corner repairs on coverboards are carried out
 - 7.6 Boards are reattached
 - 7.7 New covering material is tinted to resemble original if requested
 - 7.8 Text blocks are covered or rebacked
 - 7.9 Endpapers are pasted down or hinge realigned
 - 7.10 Book is opened after pressing

- 8. Finish the book by hand
 - 8.1 Hand finish book according to job specifications
 - 8.2 Typeface size and type are appropriate
 - 8.3 Design is in keeping with the period of publication
 - 8.4 An even impression is applied

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following knowledge must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when discussing treatment options with the owner
- Planning and organising when assembling all the necessary materials based on the job specifications
- Teamwork when maintaining the production process in association with others
- Applying mathematical ideas and techniques when evaluating ethical / rarity / value cost alternatives
- Using technology when re-covering a book
- Problem solving when identifying and selecting treatment options

Required knowledge:

The following knowledge must be assessed as part of this unit:

Determining the physical condition of a book to be rebound / restored

- What factors would render a book unsuitable for restoration / rebinding?
- What could be the suggested options for a book unsuitable for restoration / rebinding?
- What areas of a book are most commonly in need of attention?
- How are areas of weakness and damage identified and recorded?

Identifying and selecting treatment options

- What paper and cover cleaning options are available?
- What are THREE methods of repairing a tear in paper?
- How do you replace a missing corner on a book page?
- When would the rebacking of a book be necessary?
- What steps should be taken when repairing a coverboard corner?
- Explain FOUR methods of treating aged leather.

Assembling materials for binding

- What OHS factors need to be considered when restoring books?
- Name FOUR tools used when gold finishing books.
- Name THREE adhesives used in book restoration and repair and describe under what circumstances each would be used.
- List SIX covering materials and indicate where each would be used.
- Name and explain FOUR styles of book edge decoration.
- Name and describe the methods of tanning leather.
- How is a covering material selected for a given job?
- What needs to be monitored when paring leather?
- What needs to be monitored when sharpening knives for leather paring?
- Name EIGHT types of leather commonly used in bookbinding.
- Explain the term "skiver".

Dissecting / pulling down

- List SIX different page securing methods.
- Explain the method of removing endpapers with minimal damage.
- Explain the method of cleaning sections without damage.

- Explain the terms "dog-ears" and "joints".
- What special care should be taken when removing wire stitches / sewing thread?
- Describe THREE methods of removing the adhesive from the book spine.
- What types of adhesive would you expect to find on book spines?
- Describe the methods of removing each particular adhesive.

Section sewing

- Name FOUR methods of hand sewing.
- Name FOUR important considerations to be addressed when setting up for sewing.
- Why should you use a sewing frame?
- How would you choose the thickness of thread to use?
- What needs to be checked when the sewing thread is joined during the sewing operation?
- What needs to be checked when the sewing operation is finished off?
- What would result if the sewing is too loose / too tight?
- Describe FOUR hand-worked headband styles.

Book forwarding

- What important result must be achieved when gluing the spine of the book?
- What would result if the spine glue was too thick / too thin?
- How is a correct spine shape recognised?
- What problems may occur if too much round is applied to the spine?
- What problems may occur if insufficient round is applied to the spine?
- Name SIX different spine linings and the styles on which they are used.
- State the reasons for spine linings.
- What special techniques are applied to 2-on 2-off spine linings?
- Give FOUR important considerations to be given to spine linings.
- How can a good corner be recognised?
- What is the recommended turn-in?
- List FOUR steps to ensure a clean job.
- What is trimming-out?
- What determines the correct board calliper on a book?
- What micron board is recommended on a book 5 mm thick?
- What needs to be monitored when casing-in a book?

Hand finishing

- Name FOUR methods of hand finishing a book cover.
- What criteria are used to ensure an appropriate typeface is selected?
- What criteria are used to ensure the design chosen corresponds with the era of the book?
- What can be the result of uneven impressions?
- Describe a method that could be used to correct an error in finishing the title.

Quality assurance

- What quality aspects would be found in a competently restored book?
- What steps should be taken to ensure the cost effectiveness of book restoration?
- What can be done to ensure the rarity component of a book is maintained?

Information sources

- What manuals, safety and other documentation are relevant to this task and where are they kept?
- What information is included in these documents?

- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Types of equipment	<ul style="list-style-type: none"> • Range of tools, equipment and machines
Degree of autonomy	<ul style="list-style-type: none"> • Working to defined procedures and in consultation with other relevant persons to ensure production requirements are met
Enterprise procedures	<ul style="list-style-type: none"> • Range of enterprise procedures within defined work area
Quality standards	<ul style="list-style-type: none"> • Should meet client requirements and enterprise and industry standards

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Correctly restore a book according to job specifications and within the production timeframe
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Assess the physical condition of TWO books to be restored / rebound (ONE requiring rebacking and ONE requiring rebinding) and carry out restoration according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

ICPCF4107B**Set up machine for complex carton folding and gluing****Unit Descriptor**

This unit describes the performance outcomes, skills and knowledge required to set up a machine for complex carton folding and gluing.

Employability Skills

This unit contains employability skills.

Application of the Unit

This unit requires the individual to set up a machine for complex carton folding and gluing.

Unit Sector

No sector assigned

ELEMENT**PERFORMANCE CRITERIA**

- | | |
|---|--|
| 1. Prepare for job | <ul style="list-style-type: none"> 1.1 Read and interpret job requirements from job documentation or production control system 1.2 Set-up is planned and carried out correctly in minimum time with minimum wastage |
| 2. Set up carton blank transportation system | <ul style="list-style-type: none"> 2.1 Feeder is set up and adjusted according to job specifications 2.2 Carton blank pick-up and transportation system is set up and adjusted according to job specifications 2.3 Transfer systems are set up and adjusted according to job specifications |
| 3. Set up machine for complex carton folding / gluing | <ul style="list-style-type: none"> 3.1 Folding units are set up and adjusted according to job specifications 3.2 Folding rollers / belts / rails are set up and adjusted according to job specifications 3.3 Gluing system is set up and adjusted according to job specifications using glue wheel and / or multiple glue heads |
| 4. Set up carton delivery system | <ul style="list-style-type: none"> 4.1 Delivery is set up and adjusted according to job specifications 4.2 Substrate is removed from process according to job specifications 4.3 Carton transfer and control system is set up and adjusted according to job specifications |
| 5. Conduct sample run | <ul style="list-style-type: none"> 5.1 Material to be used for sample is organised correctly 5.2 Machine is set up and operated according to OHS requirements, manufacturer's specifications and enterprise procedures to produce a specified sample 5.3 Sample is visually inspected and / or tested for accuracy of folds, fibre tear, opening force, fluff and glue placement according to enterprise procedures |
| 6. Readjust settings | <ul style="list-style-type: none"> 6.1 Results are interpreted to determine adjustment requirements 6.2 Adjustment changes are carried out according to product and machine specifications |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills:

The following skills must be assessed as part of this unit:

- OHS when ensuring that the work area is safe and ready for production according to safety requirements
- Communication skills when reading and interpreting job requirements from the job documentation or production control system
- Planning and organising when setting up the carton blank transportation system before the carton delivery system
- Teamwork when maintaining the production process in association with other staff
- Applying mathematical ideas and techniques when interpreting job requirements from job documentation or the production control system
- Using technology when using carton folding and gluing machines
- Problem solving by interpreting results to determine adjustment requirements

Required knowledge:

The following knowledge must be assessed as part of this unit:

Documentation

- What information concerning folding requirements can be expected to be found in the job documentation or production control system?
- How should this information be interpreted to ensure smooth workflow throughout the factory?
- What factors must be considered when planning a folding sample?

Sheet transportation and delivery systems

- What OHS factors must be considered when setting folder transportation and delivery systems?
- What areas of the carton blank transportation system should be monitored to ensure trouble-free operation?
- What parts of the carton blank pick-up system should be adjusted to ensure accurate and continuous sheet handling?
- What areas of the delivery system should be observed to maintain neat delivery of finished work?
- What areas of the delivery system should be observed to prevent damage to the finished product?
- What needs to be checked when substrate is removed from the machine?

Machine setting for complex folding and gluing

- What OHS factors must be considered when setting and/or adjusting the folding unit?
- What is the largest / smallest size carton blank that can be processed on this machine?
- In what ways can the machine be adapted to facilitate smaller / larger stock?
- What determines the accuracy of carton blank entering folding rollers?
- What can cause scratching / scuffing of substrate during transportation?
- What determines the speed of the machine?
- What problems can be expected if the machine is running too fast?
- What problems can be expected if the machine rollers are set too loose?
- What problems can be expected if there is too much roller pressure?
- What problems can be expected if the delivery system is not set correctly?
- What determines the correct roller pressure for a given job?

- How can roller pressures be checked for correctness?
- What needs to be adjusted if the carton blank is out-of-square?
- Give FOUR reasons for the sheet being out-of-square.
- What can be adjusted to ensure that the carton blanks are not smudging / "scuffing"?
- What needs to be adjusted if the sheet will not leave the folding unit?

In-line processes

- Explain the steps necessary to set up the gluing units.
- What care should be taken to ensure a neat and clean gluing job?
- What adhesive is used in the gluing unit?
- How is the length of the glue line adjusted?

Checking and adjustment

- Name FOUR causes of out-of-square folding and explain how each may be corrected.
- What segments of quality assurance would be inspected at the completion of the sample run?
- What communication action should be instigated if the job is out-of-square?
- What communication action should be instigated if ink is too wet for production?
- What communication action should be instigated if the job does not coincide with the sample?
- What areas of the machine should be adjusted if carton blank is creasing?
- What areas of the machine should be adjusted if carton blank is not entering the machine?
- List FOUR items that must be checked against the client's sample.

Information sources

- What machine manuals and safety documentation are relevant to this task and where are they kept?
- What information is included in these documents?
- What other sources of information are available?

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Machinery	<ul style="list-style-type: none"> • A Royal 40, a Bobst Media, a Bobst Domino and may include the use of multiple gluing units
Carton board	<ul style="list-style-type: none"> • Different sizes and weights of cartons
Glue	<ul style="list-style-type: none"> • PVA and holt melt glue
Degree of autonomy	<ul style="list-style-type: none"> • Working independently, solving set up problems to ensure production requirements are met

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Critical aspects for assessment and evidence required to demonstrate competency

Evidence of the following is essential:

- Set up machine to produce complex cartons as required in normal production on, for example, a Royal 40, a Bobst Media or a Bobst Domino
- Demonstrate an ability to find and use information relevant to the task from a variety of information sources
- Set up at least THREE crash lock, six-corner and specialty work carton jobs, using different sizes and weights of cartons and including use of multiple gluing units, according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- Evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity

Context of and specific resources for assessment

Assessment must ensure:

- Assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- For example a Royal 40, Bobst Media or Bobst Domino machine that may include multiple gluing units

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.



Australian Government
**Department of Education,
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ICP05 Printing and Graphic Arts Training Package
**Printing and Graphic Arts Training Package (Volume 4 -
Converting, Binding and Finishing Units of Competency)**
Volume 4 of 6



Australian Government
**Department of Education,
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ICP05 Printing and Graphic Arts Training Package
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