Australian Government

Department of Education, Employment and Workplace Relations

ICPCF220C Produce basic converted or finished product

Revision Number: 1

ICPCF220C Produce basic converted or finished product

Modification History

Not applicable.

Unit Descriptor

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

Application of the Unit

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

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Maintain operation of reel (OR Element 2)	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)	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	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
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

ELEMENT	PERFORMANCE CRITERIA
5. Maintain basic fastening (adhesive/ mechanical/thermal) process	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. 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	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
8. Identify and rectify	8.1. Product and ***substrate*** are monitored and tested to

ELEMENT	PERFORMANCE CRITERIA
problems or faults	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

ELEMENT	PERFORMANCE CRITERIA
	are accurately completed where required by enterprise procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- 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

- OHS factors that must be considered when setting up and/or operating machine transport systems
- areas of the reel stand that should be monitored to ensure trouble-free operation
- area of the web control system that should be adjusted to maintain correct web tension
- OHS factors that must be considered when setting up and/or operating machine delivery systems
- checks needed when substrate is removed from the machine
- OHS factors that should be considered in the transport and delivery areas of the machine
- procedures that will ensure smooth transport of sections through the machine
- steps that can be taken to ensure smooth delivery of sections
- important factors to consider when setting the feeder
- the setting of the double/misfeed sheet calliper system
- the different types of sheet/section delivery systems
- the largest and smallest sheet or section size that can be run through this machine
- areas of the machine that should be adjusted to allow for 42 gsm stock
- OHS factors that must be considered when maintaining the cutting process
- indicators that demand the replacement of a knife
- adjustingcutting pressure
- removing the waste (offcut) from the work area
- important points to monitor when maintaining the cutting process which will ensure that the machine can be kept running without interruption?
- OHS factors that must be considered when problem solving on the machine maintaining the cutting process

REQUIRED SKILLS AND KNOWLEDGE

- check needed when packing cutting devices
- procedure for correcting common machine faults
- adjustments if the cover is marked (scuffed) when trimming
- OHS factors that must be considered when using the folding machine
- areas to continuously observe to ensure the smooth trouble-free operation of the machine
- areas of the in-line process that should be monitored to assure the quality of the product
- OHS factors that must be considered when adjusting/correcting the machine
- causes of out-of-square folding and explain how each may be corrected
- segments of quality assurance that would be inspected at the completion of the sample run
- communication action that should be instigated if job is out-of-square
- communication action that should be instigated if the ink is too wet for production
- communication action that should be instigated if the job does not coincide with the sample
- parts of the machine that should be adjusted if the sheet is creasing
- OHS factors that should be considered when operating the machine
- factors that govern the speed at which the machine will operate
- indicators that the machine was in need of lubrication
- OHS factors that should be considered before readjusting the machine
- method of correction that is needed to prevent double sheet feeds
- circumstances the machine would need to be adjusted
- acceptable collating result
- items that must be checked against the client's sample
- OHS factors that must be considered when using hot melt adhesive
- safety clothing that is available for use when operating adhesive binders
- OHS factors that should be considered before readjusting the machines
- areas of the in-line process that should be monitored to assure the quality of the product
- sectors to observe to ensure that the production process is trouble-free and continuous
- the need for the machine to be adjusted
- adhesive binder, adhesive application adjustment
- straightening the wire feed of a wire stitcher
- possible reasons for the welding being unsuccessful for a high frequency welder
- quality aspects that should be considered in a completed adhesive-bound job
- quality aspects that should be considered in a completed high frequency welded job
- quality aspects that should be considered in a completed wire-stitched job
- ways of altered production to meet client requirements
- OHS factors that must be considered when maintaining the laminating and in-line

REQUIRED SKILLS AND KNOWLEDGE
processes • assuring registration of laminating • monitoring of the in-line processes to ensure a quality product • laminating problems that may occur during the operation of the machine • adjustments or correction procedures that may need to be made to ensure accurate operation of the process • quality aspects that should be considered in a completed laminated job • in Ways of altered production to meet client requirements • OHS factors that must be considered when conducting machine shutdown procedures • checks that are needed when waste is removed from the machine and surrounding area for disposal or recycling • checksthat are needed during the machine shutdown procedure • checks that are needed when the cutting devices or knives are cleaned or replaced ready for the next run • areas of the machine that require cleaning at the end of the run • materials that need to be cleaned from the machine • preparing the finished work for dispatch • keeping the machine clear of surface rust (condensation) • features that need to be checked on the finished product • common faults that cause product to be rejected, and how can they be fixed/avoided • testing procedures that are available and why are they used • production records that need to be kept or written up • information that should be included in this reporting procedure • machine manuals, safety and other documentation that are relevant to this task, where they are kept and information that is included in these documents

Evidence Guide

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.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	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 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.

EVIDENCE GUIDE	
Guidance information for assessment	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.

Range Statement

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.	
Substrate types may include:	• substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, corrugated board or metal.
Cutting or embossing process may include:	• flat-bed/rotary/trimming.
Folding units may include:	• range of machines with manual, semi-automated, fully automated or computerised process control.
Collating units may include:	• range of suction and friction feed machines with manual, semi-automated, fully automated or computerised process control.
Fastening units may include:	• range of machines with manual, semi-automated, fully automated or computerised process control.
Laminating units may include:	• manual, semi-automated, fully automated and computerised process control.
In-line processes may include:	• 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.
Equipment may include:	• either single process machines or multiple process machines.
Substrate handling may include:	• wide or narrow reel or large or small sheet or large or small book or section handling systems.
Converting/finishing processes may include:	• single of multiple knife, manual or programmable 3- or 5-knife trimmers and spine trimmers • flat-bed or rotary die or forme cutting,

RANGE STATEMENT	
	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.
Cutting units may include:	• 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.
Laminating adhesives may include:	• single or two-component adhesives used in laminating.
Shapes for die cutting may include:	• simple or single shapes.
Complexity for fastening may include:	• basic refers to simple hand-fed or single-head adhesive and thermal machines, single-head mechanical machines.

Unit Sector(s)

Unit sector	

Competency field

Competency field	Converting, Binding and Finishing

Co-requisite units

Co-requisite units		