



Australian Government

Department of Education, Employment and Workplace Relations

ICPCF426C Produce complex flat-bed die cut or embossed product

Revision Number: 1

ICPCF426C Produce complex flat-bed die cut or embossed product

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to produce complex flat-bed die cutting or embossing.
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Application of the Unit

Application of the unit	This unit describes the skills and knowledge required for complex flat-bed die cutting or embossing.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

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

ELEMENT	PERFORMANCE CRITERIA
	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. 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	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. 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

ELEMENT	PERFORMANCE CRITERIA
	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

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- 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

- 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
- area of the web control system that should be adjusted to maintain correct positioning of the web
- areas of the sheet-fed feeder that should be monitored to ensure trouble-free operation
- parts of the sheet pick-up system that are to be adjusted to ensure accurate and continuous sheet handling
- OHS factors that must be considered when setting up and/or operating machine delivery systems
- areas of the delivery system that should be observed to maintain tension
- areas of the delivery system that should be observed to prevent damage to the finished product
- checks to be made when substrate is removed from the machine
- OHS factors that must be considered when maintaining the cutting process
- indicators that demand the replacement of a knife
- checks to be made when cutting pressure is adjusted
- ways in which registration can be guaranteed
- production difficulties that can be expected during production runs
- OHS factors that must be considered when problem solving on the machine maintaining the cutting process
- checks to be made when packing cutting devices

REQUIRED SKILLS AND KNOWLEDGE

- checks to be made when correcting dull cutting edges on equipment
- checks to be made when correcting the depth of embossing
- checks to be made when correcting out-of-square results
- OHS factors that must be considered when conducting machine shutdown procedures
- checks to be made when waste is removed from the machine and surrounding area for disposal or recycling
- checks to be made when shutting down the machine
- checks to be made 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
- production records that need to be kept or written up
- information that should be included in this reporting procedure
- quality aspects that should be considered in a completed cutting job
- steps that should be taken to ensure that important features of the production control system are followed
- machine manuals, safety and other documentation that are relevant to this task and 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:

- 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.

Guidance information for assessment

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

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.	
<i>Substrate handling</i> may include:	• wide or narrow reel or large or small sheet handling systems.
<i>Cutting process</i> may include:	• flat-bed die and forme cutting, embossing.
<i>In-line processes</i> may include:	• 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.
<i>Flat-bed cutting units</i> may include:	• a range of machines with dies, cutting formes or drills and manual, semi-automated, fully automated or computerised process control.
<i>Shapes</i> may include:	• complex or multiple shapes.
<i>Substrate types</i> may include:	• range of substrates within the major categories of paper, pressure sensitive material, board, plastics and related films, or metal.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Converting, Binding and Finishing
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Co-requisite units

Co-requisite units		