



Australian Government

Department of Education, Employment and Workplace Relations

ICPCF328C Produce complex rotary die cut or embossed product

Revision Number: 1

ICPCF328C Produce complex rotary 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 rotary die cut or embossed product.
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Application of the Unit

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.
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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 system (OR Element 2)	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 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 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 operation of complex rotary die cutting or embossing 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 qu Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of sample approved 3.4. Packing of cutting devices is monitored and adjusted to ensure quality of product meets the standard of sample approved
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

ELEMENT	PERFORMANCE CRITERIA
	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	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	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	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

ELEMENT	PERFORMANCE CRITERIA
	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

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- 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

- 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
- items of importance to consider when maintaining rotary cutting operations
- checks made on: cutting pressures, cutting registration, packing of cutting area, condition of cutting edges, the smooth running of the operation
- indicators that demand the replacement of cutting edges
- checks to be made when cutting accuracy is adjusted
- ways in which a clean and precise result can be guaranteed
- production difficulties that can be expected during production runs
- OHS factors that must be considered when problem solving on the rotary machine cutting process

REQUIRED SKILLS AND KNOWLEDGE

- checks to be made when packing cutting devices
- procedure for correcting any machine faults
- 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, stored or replaced ready for the next run
- areas of the machine that require cleaning at the end of the run
- cleaning agents that are used in cleaning the machine
- build-ups that need to be cleaned from the machine
- 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 rotary cutting job
- steps that should be taken to ensure that important features of the production control system are followed
- production areas that may have to be adjusted to meet client requirements
- items that must be checked against the client's sample
- 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 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
- 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, for example:

- ICPCF327C Set up machine for complex rotary die cutting or embossing.

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:	• rotary die and forme cutting, and 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>Rotary cutting units</i> may include:	• a range of machines with dies or cutting formes and manual, semi-automated, fully automated or computerised process control.
<i>Shapes</i> may include:	• complex, 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		