



Australian Government

Department of Education, Employment and Workplace Relations

ICPCF321C Set up and produce complex guillotined product

Revision Number: 1

ICPCF321C Set up and produce complex guillotined product

Modification History

Not applicable.

Unit Descriptor

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.
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Application of the Unit

Application of the unit	This unit requires the individual to complete complex guillotining (including knife changing) involving programmable guillotines and/or complex cutting sequences.
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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. Prepare job	<p>1.1. Job specifications are read and interpreted from job documentation or production control system</p> <p>1.2. Set-up is planned and carried out correctly in minimum time with minimum wastage</p> <p>1.3. Availability of all job related components is checked</p> <p>1.4. Grip and lay edges of sheet are identified</p>
2. Install and replace cutting knives into machine	<p>2.1. Appropriate knives are selected and safely secured to machine</p> <p>2.2. Dull knives are removed and bolted securely to protective board</p> <p>2.3. Cutting sticks are replaced when necessary</p>
3. Set up machine for guillotining	<p>3.1. Guillotine is set up and adjusted according to job specifications</p> <p>3.2. Clamping pressures are set up and adjusted according to job specifications</p>
4. Conduct sample cut	<p>4.1. Material to be used for sample is organised correctly</p> <p>4.2. Machine is set up and operated to produce a specified sample according to OHS requirements, manufacturer's specifications and enterprise procedures</p> <p>4.3. Sample is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures</p> <p>4.4. Results are interpreted to determine adjustment requirements</p> <p>4.5. Adjustment changes are carried out according to product and machine specifications</p>
5. Maintain guillotining process	<p>5.1. Knife and cutting stick condition is monitored and adjusted to ensure the quality of product meets the standard of the approved sample</p> <p>5.2. Cutting pressures are monitored and adjusted to ensure the quality of product meets the standard of the approved sample</p> <p>5.3. Registration of knives is monitored and adjusted to ensure quality of product meets the standard of the approved sample</p>
6. Maintain operation of production process	<p>6.1. Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>6.2. Production is maintained according to OHS requirements, manufacturer's specifications and enterprise procedures</p> <p>6.3. Manual and/or automatic control is used according to job specifications</p> <p>6.4. Performance is monitored and verified using the process control system according to enterprise procedures</p> <p>6.5. Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention</p> <p>6.6. Process adjustments to eliminate problems are reported according to enterprise procedures</p> <p>6.7. Faulty performance of equipment is identified and reported according to enterprise procedures</p> <p>6.8. Waste is sorted according to enterprise procedures</p>
7. Identify and rectify problems and faults	<p>7.1. Problems in guillotining machine operation are identified and reported according to enterprise procedures</p> <p>7.2. Adjustments or corrections are carried out according to specified procedures and are consistent with operator's skill level</p> <p>7.3. Guillotining machine operation is checked to ensure correct operation</p>
8. Conduct shutdown of production process	<p>8.1. Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures</p> <p>8.2. Shutdown is conducted in association with fellow workers and in compliance with OHS requirements</p> <p>8.3. Substrate waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures</p> <p>8.4. Machine faults requiring repair are identified and reported to designated person according to enterprise procedures</p> <p>8.5. Repair/adjustment is verified prior to resumption of operations</p>
9. Clean guillotining machine at end of run	<p>9.1. Knife and machine bed are cleaned ready for next run</p> <p>9.2. <i>Cutting</i> machine is disengaged and cleaned ready for next run</p> <p>9.3. Production records or other documentation are</p>

ELEMENT	PERFORMANCE CRITERIA
	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 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

- information concerning cutting would that you expect to find in the job documentation or production control system
- interpretation of this information to ensure smooth workflow throughout the factory
- SIX trade terms that may be used in the documentation for complex cutting or guillotine knife change operations
- elements that must be considered when planning a cutting sequence
- OHS factors that must be considered when handling knife blades during the knife change operation
- recommended knife angles for general cutting
- use of a double bevel on a guillotine knife
- factors that indicate that a new blade is needed
- result of a dull blade is used continuously
- difference between sharp knife from a dull knife
- information that must be sent with dull knife when replaced
- necessary time to replace a cutting stick
- forces that are acting on a guillotine knife
- OHS factors that must be considered when setting up and operating the guillotine
- factors that should be considered when setting up a guillotine for a complex cutting job
- choosing the correct clamping pressure for a given job
- result of the clamp pressure not being appropriate for the stock
- clamp pressure adjustment

REQUIRED SKILLS AND KNOWLEDGE

- clamp pressure that is recommended for NCR paper
- clamp pressure that is recommended for 80gsm offset paper
- clamp pressure that is recommended for 2400um strawboard
- expectation if the knife angle is less than 19 degrees
- expectation if the knife angle is more than 24 degrees
- need for a knife with a double angle
- knife angles on a double bevelled knife
- largest and smallest size sheets that can be processed on this machine
- procedures that can be used to complete undersize requirements
- recognising a "work and turn" job
- recognising a "work and twist" job
- recognising a "work and tumble" job
- recognising a "work and back" job
- problems that can occur when activating the automatic knife
- types of job not suitable for automatic cutting
- important operation that is required to trim multi-section books or magazines with bulky spines
- OHS factors that must be considered when checking and adjusting the machine
- the machine adjustment parameters
- checks that should be made after readjustment
- settings that may need to be altered after checks have been made
- items of the cutting result that should be checked against the sample
- steps that are taken if the cutting result does not coincide with the sample
- areas of the machine that should be continuously monitored
- identifying a lay and gripper edge if not marked (FIVE methods)
- OHS factors that must be considered when maintaining the production process
- production factors that must be considered when maintaining the production process
- production difficulties that can possibly affect the smooth production flow
- reporting procedures that are to be followed if the machine should malfunction
- treatment / disposal of waste from the guillotine area
- ways to mark lay and gripper edges on sheets
- result of the lay and grip edges are not recognised
- need to build-up the clamp of a guillotine
- "packing-up" the clamp of a guillotine
- important operation that is required to trim multi-section books or magazines with bulky spines
- reasons why the guillotine knife will not operate when the machine is turned on
- reasons why a book block may be cut out-of-square
- reasons for the program not working after it has been entered into the machine
- parts of the guillotine that should be checked if, after a cut, the top sheets are

REQUIRED SKILLS AND KNOWLEDGE

- longer than the bottom sheets
- parts of the guillotine that should be checked if, after a cut, the top sheets are shorter than the bottom sheets?
- result of no replacing the cutting stick regularly
- part of the guillotine that should be checked if, after a cut, the top sheets are out-of-square?
- part of the guillotine that should be checked if, after a cut, the top sheets are creasing along the cut line?
- checks necessary when the clamp plate is removed
- need for machine lubrication
- information about correct types and methods of lubrication
- OHS factors that must be considered when shutting down and/or cleaning the machine
- special operations that are essential when shutting down the machine
- maintenance procedures that should be used to keep the machine in good condition and order
- methods that are employed to rid the machine of waste
- cleaning agents that are used on the guillotine
- 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
- altering production need to meet client requirements
- items that must be checked against the client's sample
- steps that should be taken if the test sample is incorrect
- areas of the finished product that should be inspected
- 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
- other sources of information that are available

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • 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	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> • 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	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • 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	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>

Range Statement

RANGE STATEMENT	
<p>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.</p>	
<i>Cutting process</i> may include:	<ul style="list-style-type: none"> single knife, programmable guillotines, complex cutting sequence.
<i>Cutting units</i> may include:	<ul style="list-style-type: none"> range of semi-automated, automated or computerised guillotines.
<i>Substrate types</i> may include:	<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.
<i>Substrate handling</i> may include:	<ul style="list-style-type: none"> large or small sheet handling systems.

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	