



Australian Government

Department of Education, Employment and Workplace Relations

ICPPR232C Produce basic lithographic printed product

Revision Number: 1

ICPPR232C Produce basic lithographic printed product

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to produce basic lithographic printing, including small offset product.
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Application of the Unit

Application of the unit	This unit requires the individual to operate a lithographic press ensuring an efficient routine production flow that maintains product quality standards. Any production problems are rectified with minimum downtime. The machine is correctly shut down and cleaned according to OHS guidelines.
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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 routine operation of reel system (OR Element 2)	1.1. Reel stand and rewind section are is monitored and adjusted to maintain correct tension and to ensure no marks or blemishes to finished product and 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 and removed from process according to job instructions 1.4. Sheeting section is monitored and adjusted to ensure quality and efficient product delivery
2. Maintain routine operation of sheet system (OR Element 1)	2.1. Feeder and delivery sections are 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 to and removed from process according to job instructions
3. Maintain basic routine lithographic printing process	3.1. Lithographic plate and plate cylinder condition is monitored and adjusted to ensure the quality of printed product meets the standard of the approved proof 3.2. Lithographic blanket and blanket cylinder condition is monitored and adjusted to ensure the quality of printed product meets the standard of approved proof 3.3. Lithographic impression cylinder condition is monitored and adjusted to ensure quality of printed product meets the standard of approved proof 3.4. Lithographic inking condition is checked and maintained to ensure quality of printed product meets the standard of approved proof 3.5. Lithographic dampening system condition is monitored and adjusted maintained to ensure quality of printed product meets the standard of approved proof
4. Maintain routine production process	4.1. Production process is operated in association with fellow workers and according to company

ELEMENT	PERFORMANCE CRITERIA
	<p>specifications and planned daily schedule</p> <p>4.2. Production is maintained within OHS requirements and company and manufacturer's specifications</p> <p>4.3. Manual and/or automatic control is used as per specification</p> <p>4.4. Performance is monitored and verified according to enterprise procedures</p> <p>4.5. In performance, colour, register and position of print are monitored and adjusted maintained throughout production run</p> <p>4.6. Faulty performance of equipment is identified and reported according to enterprise procedures</p> <p>4.7. Waste is sorted according to enterprise procedures</p>
5. Rectify minor lithographic machine faults	<p>5.1. Adjustments or corrections are carried out according to specified procedures and consistent with operator's skill level</p> <p>5.2. Problems with lithographic machine operation is identified and reported according to enterprise procedures</p> <p>5.3. Lithographic machine operation is checked to ensure correct operation</p>
6. Conduct shutdown of production process	<p>6.1. Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures</p> <p>6.2. Shutdown is conducted in association with fellow workers and in compliance with OHS requirements</p> <p>6.3. Unused <i>ink</i> is correctly labelled and stored according to manufacturer/supplier specifications and enterprise procedures</p> <p>6.4. Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures</p> <p>6.5. All product is removed from operating area</p> <p>6.6. Machine faults requiring repair are identified and reported to designated person according to enterprise procedures</p> <p>6.7. Repair/adjustment is verified prior to resumption of operations</p>
7. Clean and wash up printing machine at	7.1. Cylinders, plate and roller surfaces are cleaned ready for next run

ELEMENT	PERFORMANCE CRITERIA
end of print run	<p>7.2. Inking system and dampening system are washed up ready for next run, and liquid waste is disposed of according to company and regulatory requirements</p> <p>7.3. <i>In-line</i> printing/converting/binding/finishing units are cleaned ready for next run</p> <p>7.4. Reef Reel-fed, transportation and delivery systems are disengaged and cleaned ready for next run</p> <p>7.5. Sheet feed, transport and delivery system are disengaged and cleaned ready for next run</p> <p>7.6. Production records or other documentation are accurately completed where required by enterprise procedures</p>

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 of ideas and information by providing feedback to internal and external clients about printing, in-line processes and job specifications
- collecting, analysing and organising information by collating details of job and machine specifications and printing processes to ensure efficient production
- planning and organising activities by coordinating sequences for printing and wash-up
- teamwork when communicating with work team members and workers involved in prior and subsequent processes to ensure efficient production
- mathematical ideas and techniques by calculating consumables requirements
- problem-solving skills by identifying print problems and correcting during print run
- use of technology by using monitoring systems, understanding their output and feeding into production management systems

Required knowledge

- reel or sheet transportation and delivery
- OHS concerns when loading and handling heavy reels
- sheets are fanned before loading into the press
- double sheet detector be set and checked during the print run
- effect on the print of excessive tension on the rewinding reel
- implications if web is not spliced correctly
- components that can be adjusted to ensure correct delivery
- effect excessive suction on the slow-down wheels has
- lithographic printing operations
- non-image area of the print was scumming when printing
- causes of emulsification while printing on a lithographic printing press
- signs of wear in the image area of the plate
- level the ink level should be maintained at
- in-line processes
- OHS concerns for the in-line components of the press
- frequency the in-line components of the job should be examined
- quality control and problem solving
- precautions that should be taken to ensure that the rewound product is of consistent acceptable quality
- identification of material that is not of an acceptable standard

REQUIRED SKILLS AND KNOWLEDGE

- frequency at which the quality of the product be assessed
- product that is deemed unacceptable by the operator is marked
- finding information concerning the correct operation of the machine
- shutdown and wash-up of the press
- dangers that exist from solvents and solutions used to clean the inking system, plates, cylinders and the press
- effect could excessive gum has on the plate image
- parts of the machine need to be thoroughly cleaned following the print run
- components that are to be inspected for wear following the print run
- records that are important for following or repeat prints
- machine manuals, safety and other documentation that are relevant to this task and where are they kept and information that is included in these documents

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 ability to:</p> <ul style="list-style-type: none"> • routine within this context relates to the set up and production of print runs. The set up of equipment and production is straightforward and does not involve a significant amount of deviation from using standard equipment settings. In this sense, routine does not refer to a job that an individual might repeat on a regular basis • 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 • produce TWO basic lithographic printing jobs (if possible including at least ONE in-line process) according to job specifications, enterprise procedures and the 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	<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 • lithographic printing machine.
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>

EVIDENCE GUIDE

for example:

- ICPSU201C Prepare, load and unload reels and cores on and off machine
- ICPSU202C Prepare, load and unload product on and off machine
- ICPSU208C Operate and monitor machines (basic)
- ICPPR331C Set up for basic lithographic printing.

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>Substrate handling</i> may include:	<ul style="list-style-type: none"> • wide or narrow reel or large or small sheet handling systems.
<i>Machines</i> may include:	<ul style="list-style-type: none"> • a range of single sheet, stream and reel-fed machines with manual, semi-automated, fully automated or computerised process control.
<i>Inks/coatings</i> may include:	<ul style="list-style-type: none"> • range of standard inks commonly used in printing.
<i>In-line processes</i> may include:	<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.
<i>Colour matching systems</i> may include:	<ul style="list-style-type: none"> • use of visual colour assessment and matching under controlled lighting conditions.
<i>Design</i> may include:	<ul style="list-style-type: none"> • simple graphics and text. Minor variation in registration and position.
<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>Routine</i> may include:	<ul style="list-style-type: none"> • routine within this context relates to the set up and production of print runs. The set up of equipment and production is straightforward and does not involve a significant amount of deviation from using standard equipment settings. In this sense, routine does not refer to a job that an individual might repeat on a regular basis.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Printing
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Co-requisite units

Co-requisite units		