



Australian Government

Department of Education, Employment and Workplace Relations

ICPPP272C Produce gravure cylinders manually

Revision Number: 1

ICPPP272C Produce gravure cylinders manually

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to manually make gravure cylinders.
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Application of the Unit

Application of the unit	This unit requires the individual to manually make gravure cylinders and establish and maintain a chemical register.
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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. Select the plate	1.1. The job specifications are interpreted to determine the appropriate type of cylinder base and/or shell for the job 1.2. The cylinder and/or shell is selected to deliver the quality of output required by the job brief
2. Pre-plan the process	2.1. The work area is tidied and cleaned to ensure quality of output and a safe work site 2.2. The exposure and coating equipment is maintained according to manufacturer's specifications and safety requirements 2.3. Exposure is controlled using step wedges and densitometry 2.4. The cylinder is coated according to manufacturer's specifications 2.5. The cylinder is exposed making sure image direction, autotrons and tracker lines are correctly positioned according to job specifications 2.6. OHS requirements are observed when handling chemicals
3. Expose the plate	3.1. The chemical balance is checked and maintained in the developing tank 3.2. The cylinder is developed according to manufacturer's specifications, enterprise procedures and safety requirements
4. Develop the plate	4.1. The etching bath is maintained to the correct activity level according to manufacturer's specifications and enterprise procedures 4.2. The cylinder is etched according to the job specifications (cell depth)
5. Finish the plate	5.1. A chemical register is established to identify and describe the purpose of each chemical and to ensure finished cylinders meet set specifications 5.2. All chemicals used in the workplace are identified and registered correctly according to safe working practices environment when making plates

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 interpreting the job brief
- collecting, analysing and organising information by matching the job brief with production requirements
- planning and organising activities by cleaning and preparing the work area
- teamwork when maintaining the production process in association with others
- mathematical ideas and techniques by calculating exposure and using a densitometer
- problem-solving skills by recognising cylinder faults and correcting
- use of technology by using equipment correctly to ensure ease of subsequent processing

Required knowledge

- chemical names and symbols for three chemicals used in cylinder production
- standard safety procedures used when handling gravure chemicals
- two methods of manual gravure cylinder production
- cylinder balancing and how is it achieved
- preparation processes for both steel and aluminium cylinder bases
- Blue Print and how is it produced
- Direct Transfer method of cylinder production
- cell depth determination
- chemical of the etching solution
- thickness chrome coating on the etched surface
- factors that govern the rate of etch
- 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	
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 ability to: - the cylinder is correctly and safely processed and etched to ensure a quality print - the underlying skills of cylinder making should be transferable across the pre-press sector. It is important that the substrate for reproduction is identified and that the quality of the cylinder be suitable for the identified printing processes - demonstrate an ability to find and use information relevant to the task from a variety of information sources - manually produce TWO gravure cylinders and establish and maintain a chemical register according to the listed Performance Criteria.
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 - it is expected that special purpose tools and equipment will be used where appropriate.
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>Output</i> may include:	a variety of cylinders and shells.
<i>Quality standards</i> may include:	should meet client requirements and enterprise and industry standards.
<i>Input</i> may include:	line and tone images.
<i>Capture</i> may include:	carbon tissue and direct transfer methods.
<i>Manipulation/edit</i> may include:	chemical processing - conventional and post.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Pre-press
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Co-requisite units

Co-requisite units		