



Australian Government

Department of Education, Employment and Workplace Relations

ICPSP270C Manually prepare and produce screen prints

Revision Number: 1

ICPSP270C Manually prepare and produce screen prints

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to manually prepare and produce screen prints.
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Application of the Unit

Application of the unit	This unit requires the individual to produce a print on a range of common substrates, using fundamental manual screening techniques. This unit is required for long print runs which therefore involve a production process.
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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. Identify job requirements	1.1. Material safety data sheets are used to identify safe chemical handling procedures 1.2. Substrate is checked for conformance to job specifications with any irregularities reported and/or rectified 1.3. Ink is checked for conformance to job specifications 1.4. Stencil is checked for conformance to job specifications
2. Prepare machine to print	2.1. Substrate position and stencil registration are adjusted according to job specifications 2.2. Ink is applied to the screen in the quantity required for the screen size 2.3. Equipment is kept clean and spillage is minimised
3. Produce proof print	3.1. Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying/curing , artwork detail and other technical aspects according to job specifications 3.2. Adjustments are made according to product and machine specifications 3.3. Belt speed and energy required are set to achieve desired curing or drying properties 3.4. Appropriate approval to commence production is sought prior to commencement
4. Run job and monitor print quality	4.1. Printing speed production is adjusted to maximise quality and output 4.2. Print quality is continuously evaluated and adjusted as required 4.3. Effects of ink alterations during run are monitored and any discrepancy is notified according to enterprise procedures 4.4. Workplace documentation on job is completed as required 4.5. Curing and drying are constantly monitored and adjusted according to manufacturer's/ supplier's and job specifications
5. Carry out routine user maintenance	5.1. Equipment is cleaned according to enterprise procedures 5.2. Fault conditions are identified and reported according to enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
6. Stack production output	<p>6.1. Output is checked for thorough drying/curing before stacking</p> <p>6.2. Job status and progress are checked for conformance to job specifications and any necessary action is taken</p>
7. Conduct shutdown of the production process	<p>7.1. Material is transferred to correct destination in a safe manner</p> <p>7.2. Excess ink, screens, squeegees and flood coaters are removed and cleaned according to OHS requirements and manufacturer's/supplier's specifications</p> <p>7.3. Waste materials and chemicals are disposed of according to manufacturer's/supplier's specifications, regulatory requirements and enterprise procedures</p> <p>7.4. Equipment and surrounding areas are cleaned according to manufacturer's/supplier's specifications</p> <p>7.5. Tools and equipment are identified, stored and maintained according to manufacturer's specifications to ensure ease of access and operator safety</p> <p>7.6. The correct procedure for dealing with spilt chemicals is demonstrated according to OHS requirements</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 seeking appropriate approval to commence production prior to commencement
- collecting, analysing and organising information by running off and checking the proof for various aspects according to the job specifications
- planning and organising activities by continuously evaluating and adjusting print quality
- teamwork when maintaining the production process in association with others
- mathematical ideas and techniques by making adjustments according to product and machine specifications
- problem-solving skills by undertaking the correct procedure for dealing with spilt chemicals
- use of technology by using manual screen printing equipment

Required knowledge

- information that can be gained from material data safety sheets
- the need to check the substrate for conformance to the job specifications
- action required if the ink did not comply with the job specifications
- compliance checks that are made with the stencil
- limitations that you have when setting the substrate position
- the result if too much ink were applied to the screen
- the need to keep equipment clean
- OHS concerns that are there when producing a manual print
- checks to be made on the printed sheet when the proof print has been run off
- the drying/curing system to be used for this application
- product and machine specifications
- the result if the belt speed was too high
- the need to obtain final approval before commencing the production run
- aspects of the print that are evaluated during printing
- the need to make ink alterations during the run
- the workplace documentation action when the print run is completed
- OHS concerns that are there in relationship to drying/curing systems?
- maintenance that should be carried out on this machine
- the importance of reporting any faulty equipment
- how do you determine whether a print is dried/cured prior to stacking?

REQUIRED SKILLS AND KNOWLEDGE

- what would be the result of stacking while the ink film is still wet?
- what action may be necessary if problems occur with job progress?
- identifying the job's destination when you have completed the run
- the result of not keeping screens and squeegees clean
- the result of not following correct procedures when disposing of liquid waste
- the result of not keeping equipment and surrounding areas clean
- manuals, safety and other documentation that are relevant to this task and where are they kept
- 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 following is essential:</p> <ul style="list-style-type: none"> • set up screen printing machinery and produce a print that meets job specifications on a range of common substrates, using fundamental manual screening techniques • for valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance • 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 both of these. Off the job assessment must be undertaken in a closely replicated workplace environment • manual screen printing equipment.
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>Substrate</i> may include:	<ul style="list-style-type: none"> material or substance that will hold an image.
<i>Job specifications</i> may include:	<ul style="list-style-type: none"> job sheets, work tickets or processing orders.
<i>Drying/curing</i> may include:	<ul style="list-style-type: none"> manual drying systems commonly used in specific industry sections.
<i>Appropriate approval</i> may include:	<ul style="list-style-type: none"> client approval sought or enterprise approval from supervising personnel.
<i>Workplace documentation</i> may include:	<ul style="list-style-type: none"> enterprise procedural documents.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Screen Printing
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Co-requisite units

Co-requisite units	

