



Australian Government

Department of Education, Employment and Workplace Relations

ICPSP275C Automatically produce basic screen prints

Revision Number: 1

ICPSP275C Automatically produce basic screen prints

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to produce one- or two-colour automatic screen prints.
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Application of the Unit

Application of the unit	This unit requires the individual to produce screen prints using one- or two-colour automatic machines.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.	

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. Load substrate	1.1.Substrate is checked for conformance to job specifications with any irregularities reported and/or rectified 1.2.Substrate position and stencil registration are adjusted according to job specifications
2. Apply ink to screen	2.1.Ink is applied to the screen in the quantity required for the screen size 2.2.Equipment is kept clean and spillage is minimised 2.3.Ink is checked for conformance to job specifications 2.4.Feeder is set and adjusted to suit substrate
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 as required 3.3.Appropriate approval to commence production is sought prior to commencement 3.4.Belt speed and energy required are set to achieve desired properties and then printing speeds are adjusted to suit
4. Run job and monitor print quality	4.1.Printing speed production is adjusted to maximise quality and output 4.2.Print quality and sheet feeder are continuously evaluated and adjusted as required 4.3.Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer's/supplier's and job specifications 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 manufacturer's/supplier's specifications 5.2.Fault conditions are identified, reported and/or rectified according to enterprise procedures
6. Handle production output	6.1.Output is checked for thorough drying/curing before handling 6.2.Job status and progress are checked for conformance

ELEMENT	PERFORMANCE CRITERIA
	to job specifications and any necessary action is taken
7. Shut down machine	7.1.Excess ink, screens, squeegees and flood coaters are removed and cleaned according to OHS requirements and manufacturer's/supplier's specifications 7.2.Waste materials are disposed of according to manufacturer's/supplier's specifications, regulatory requirements and enterprise procedures 7.3.Equipment and surrounding areas are cleaned according to manufacturer's/supplier's specifications and 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 of ideas and information by gaining approval to commence a production run
- collecting, analysing and organising information by checking job status and progress according to job specifications
- planning and organising activities by following machine shutdown procedures
- teamwork when completing workplace documentation
- mathematical ideas and techniques by adjusting print speed to maximise quality
- problem-solving skills by monitoring and responding to the effect of ink alterations
- use of technology by operating automatic and computerised screen printing machines

Required knowledge

- adjustments that are necessary to the machine prior to setting up
- maintenance that is required on the machine and feeder prior to the commencement of printing
- substrate is to be used on this job
- procedure that you use for checking the screen sequence of colours, ink, substrate and squeegee/flood coater prior to printing
- the system for setting the feed board and loading substrate
- the need to prepare substrate or item when loading the feeder
- adjustment of the stock feed system for this machine
- the correct positioning, registering and locking the screen in position
- need to adjust the off contact/peel-off requirements of the screen
- the OHS requirements when working with infra red/UV curing units
- the relationship between ink deposit, squeegee speed and belt speed/temperature of the drying/curing unit
- the routine maintenance you undertake on this drying/curing unit
- OHS concerns that are there when using an automatic machine
- the effect of humidity on the substrate
- the correct viscosity of the ink prior to printing
- the rectification of the change in the viscosity of the ink during a production run
- evaluation and maintenance of the print quality during the run
- the ideal printing rate for this substrate on this machine
- production output handling to prevent offsetting of the ink

REQUIRED SKILLS AND KNOWLEDGE

- the effect that the ink conditions have on output capacity
- the need to determine the exact count and to record production details on the job sheet
- the health hazards associated with ink/solvents
- the correct procedure for removing the ink without damaging the screen
- the correct method of cleaning squeegees/flood coaters, machine and surrounding area
- maintenance that is required on this machine after printing
- machine manuals, safety and other documentation that are relevant to this task and where they are kept
- 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 a complex print of more than two colours containing line and tone using a semi-automatic machine according to job specifications
- 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 a complex print of more than two colours containing line and tone using a semi-automatic machine according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria
- 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

Assessment must ensure:

- 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 simulated workplace environment
- access to appropriate equipment and materials.

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

Holistic assessment with other units relevant to the

EVIDENCE GUIDE**assessment**

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>Drying/curing units</i> may include:	drying systems commonly used and relative to the industry sector.
<i>Quality standards</i> may include:	should meet client requirements and enterprise and industry standards.
<i>Enterprise procedures</i> may include:	tasks must be performed according to enterprise procedures.
<i>Type of machine</i> may include:	semi-automatic and computerised screen printing machines relative to the industry sector.
<i>Complexity</i> may include:	multi-colour jobs.
<i>Degree of autonomy</i> may include:	working to defined procedures in consultation with other relevant persons to ensure production procedures are met.

Unit Sector(s)**Unit sector**

Competency field

Competency field	Screen Printing
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Co-requisite units

Co-requisite units		