



Australian Government

ICPSCP3730 Semi-automatically produce complex screen prints

Release: 1

ICPSCP3730 Semi-automatically produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 4.0.

Application

This unit describes the skills and knowledge required to produce complex screen prints of two or more colours using semi-automatic machines.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate semi-automatic screen printing machines. They may have to provide leadership and guidance to others and have some limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Screen printing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for job	1.1 Check substrate against job specifications and report and rectify any irregularities or inconsistencies 1.2 Adjust substrate position and stencil registration 1.3 Apply ink to screen in quantity required for screen size 1.4 Mix colour and ink and check against job specifications
2. Prepare for production run	2.1 Run off proof print and check for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical requirements according to job specifications, and make adjustments as required

ELEMENT	PERFORMANCE CRITERIA
	2.2 Seek approval to commence production from designated personnel 2.3 Set up belt speed and energy and adjust printing speeds according to job requirements
3. Run job and monitor print quality	3.1 Operate equipment to produce screen print according to job specifications and adjust production speed as required 3.2 Evaluate print quality throughout production run and adjust as required 3.3 Monitor and adjust curing and drying according to manufacturer specifications 3.4 Identify and report problems in machine operation according to enterprise procedures
4. Stack production output	4.1 Confirm drying and curing of output prior to stacking 4.2 Check job status and progress against job specifications and make adjustments as required
5. Shut down machine	5.1 Remove and clean excess ink, screens, squeegees and flood coaters according to work health and safety (WHS) requirements and manufacturer specifications 5.2 Remove solid and liquid waste from operating area and recycle and dispose of, as required, according to regulatory requirements and enterprise procedures 5.3 Clean equipment and surrounding areas according to manufacturer specifications and enterprise procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Description
Writing	Records information relating to job outcomes and problems with machinery
Numeracy	Uses simple mathematical calculations to determine and adjust resources and equipment
Self-management	Complies with enterprise and regulatory requirements related to own work with specific reference to safety

Planning and organising	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency • Automatically implements standard procedures for routine decisions
Problem solving	• Identifies and takes responsibility for addressing predictable problems in familiar work contexts
Technology	• Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks

Unit Mapping Information

Supersedes and is equivalent to ICPSCP373 Semi-automatically produce complex screen prints.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

Assessment Requirements for ICPSCP3730 Semi-automatically produce complex screen prints

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- produce two complex prints of two or more colours containing line and tone using a semi-automatic.

In the course of the above the candidate must:

- operate production process in association with fellow workers and according to enterprise procedures and planned daily schedule
- follow work health and safety (WHS) requirements, manufacturer specifications and enterprise procedures
- anticipate production difficulties and take preventive action to prevent occurrence.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- enterprise procedures, WHS risks and requirements for:
 - operating a semi-automatic machine and infra-red or UV curing units
 - handling chemicals, inks and solvents
- selection criteria of the substrate for the job and of ink and solvents for substrate compatibility
- required machine adjustments prior to setting up and maintenance prior to the commencement of printing
- procedure for checking screen sequence of colours, ink, substrate and squeegee or flood coater prior to printing
- the function of the printing base and maintenance that is required
- method for determining lay edge and gripper or take-off edge of the substrate
- positioning, registering and process for locking the screen in position
- selection of squeegee or shore hardness and flood coater to be used

- need to adjust off contact or peel-off requirements of the screen
- choice of belt speed and the impact of environmental conditions on the unit and output capacity
- process for monitoring and rectifying ink viscosity during a production run
- process of evaluation and maintenance of print quality during the run and machine adjustment parameters
- ideal printing rates for substrates on the required machine
- stacking and handling of production output
- purpose of determining exact print count and recording production details on job sheet
- method of cleaning squeegees or flood coater machine and surrounding area and removing ink without damaging the screen
- signs of equipment fault and enterprise personnel to report to
- maintenance required on the machine after printing
- manufacturer manuals and work health and safety documentation, including their location and purpose.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the screen printing field of work and include access to:

- cleaning chemicals
- semi-automatic printing machines.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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