



Australian Government

ICPSCP3760 Operate an automatic screen printing machine

Release: 1

ICPSCP3760 Operate an automatic screen printing machine

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 a print on a range of common substrates, using automatic equipment and screening techniques.

It applies to individuals working in the printing and graphic arts industry who may have to set up and operate power-driven or hand-operated 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. Identify job requirements	1.1 Check substrate against job specifications and report and rectify irregularities as required 1.2 Check ink against job specifications 1.3 Check artwork against job specifications
2. Prepare machine to print	2.1 Set film and complete emulsion exposure according to job specifications 2.2 Set substrate position and screen alignment 2.3 Apply ink to screen in quantity required for screen size
3. Prepare for production	3.1 Run off proof print and check for colour, strength, registration,

ELEMENT	PERFORMANCE CRITERIA
run	adhesion, clarity, gloss level, drying or curing, artwork detail and other technical requirements according to job specifications, and make adjustments as required 3. 2 Seek approval to commence production from designated personnel 3.3 Set up belt speed and energy and adjust printing speeds according to job requirements
4. Run job and monitor print quality	4.1 Operate equipment to produce screen print according to job specifications and adjust production speed as required 4.2 Evaluate print quality throughout production run and adjust as required 4.3 Monitor and adjust curing and drying according to manufacturer specifications 4.4 Identify and report problems in machine operation according to enterprise procedures
5. Stack production output	5.1 Confirm drying and curing of output prior to stacking 5.2 Label and store job according to enterprise requirements 5.3 Check job status and progress against job specifications and make adjustments as required
6. Conduct shutdown of the production process	6.1 Transfer material to required destination 6.2 Remove and clean excess ink, screens, squeegees and flood coaters according to work health and safety (WHS) requirements and manufacturer specifications 6.3 Remove solid and liquid waste from operating area and recycle and dispose of, as required, according to regulatory requirements and enterprise procedures 6.4 Clean equipment and surrounding areas according to manufacturer specifications and enterprise procedures 6.5 Identify, store and maintain tools and equipment 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 outcomes of job requirements and machinery problems
Numeracy	Uses simple mathematical calculations to determine job requirements and equipment settings
Self-management	- Appreciates the implications of regulatory responsibilities and WHS requirements related to own work - Considers own role in terms of its contribution to broader goals of the work environment
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	Identifies 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 ICPSCP376 Operate an automatic screen printing machine.

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 ICPSCP3760 Operate an automatic screen printing machine

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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:

- complete two different jobs on an automatic printing machine according to manufacturer, job, enterprise and work health and safety (WHS) requirements.

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:

- WHS requirements for:
 - applying ink to the screen and producing an automated print run
 - operating and monitoring drying or curing systems
 - reclaiming screens
- the process of recording and reporting any substrate irregularities
- the checks used for ink compatibility and stencil compatibility
- the process of setting the substrate position
- the products and materials used to keep equipment clean
- required film and emulsion exposure before production
- the quality control devices used to check print standards and acceptable variables or tolerances when checking print against the proof
- proof quality and technical requirements and their correction procedures, including:
 - colour and strength
 - registration and clarity
 - adhesion
 - gloss level
 - drying or curing
 - artwork detail

- the relationship between ink film thickness and ink density, and the range of densities allowed
- key properties that determine belt speed and heat unit setting for curing
- enterprise personnel responsible for final approval before commencing the production run
- required quality inspection during the printing process and the frequency of these inspections
- the purpose of workplace documentation
- the maintenance required on the machine and the purpose of reporting faulty equipment
- stacking, storing and handling processes and the purpose of labelling and recording processes
- the purpose of keeping equipment and surrounding areas clean, including screens and squeegees
- procedures for disposing of liquid waste
- storage procedures for screens to minimise damage
- manufacturer manuals, enterprise procedures 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
- automatic screen 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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