



Australian Government

ICPSCP375 Automatically produce complex screen prints

Release: 1

ICPSCP375 Automatically produce complex screen prints

Modification History

Release	Comments
Release 1	This version first released with ICP Printing and Graphic Arts Training Package Version 1.0.

Application

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

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 Load substrate	1.1 Substrate is checked against job specifications with any irregularities reported and rectified where possible 1.2 Substrate position and stencil registration are adjusted according to job specifications
2 Apply ink to screen	2.1 Ink is applied to screen in quantity required for screen size 2.2 Equipment is kept clean and spills are minimised 2.3 Colour is mixed and ink is checked against job specifications 2.4 Feeder is set and adjusted to suit substrate

ELEMENT	PERFORMANCE CRITERIA
3 Produce proof print	3.1 Proof print is run off and checked for colour, strength, registration, adhesion, clarity, gloss level, drying or curing, artwork detail and other technical aspects according to job specifications 3.2 Adjustments are made according to product and machine specifications 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 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 is continuously evaluated and adjusted as required 4.3 Effects of ink alterations during run are monitored and appropriate action taken according to manufacturer or supplier and job specifications 4.4 Workplace documentation is completed as required 4.5 Curing and drying are constantly monitored and adjusted according to manufacturer or supplier and job specifications
5 Carry out routine user maintenance	5.1 Equipment is lubricated, cleaned and adjusted according to manufacturer or supplier specifications 5.2 Faults are identified and reported according to enterprise procedures
6 Handle production output	6.1 Output is checked for thorough drying or curing before stacking 6.2 Job status and progress are checked against 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 work health and safety (WHS) requirements and manufacturer or supplier specifications 7.2 Waste materials are disposed of according to manufacturer or supplier specifications, regulatory requirements and enterprise procedures 7.3 Equipment and surrounding areas are cleaned according to manufacturer or supplier 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	Performance Criteria	Description
Reading	1.1, 1.2, 2.3, 3.1, 3.2, 4.3-4.5, 5.1, 6.2, 7.2, 7.3	- Establishes job requirements from relevant information - Identifies correct processes from procedural documentation
Writing	1.1, 3.3, 4.4, 5.2	Records information relating to outcomes of job requirements and machinery problems
Oral Communication	1.1, 3.3	Checks the progress and quality of the job with supervisor
Numeracy	2.1, 3.4, 4.1	Uses basic mathematical formula to calculate required resources and determine measurements and adjustments to equipment and settings
Navigate the world of work	5.2, 7.1-7.3	Complies with organisational, legal and regulatory requirements related to own work with specific reference to safety
Get the work done	1.1, 1.2, 2.2-2.4, 3.1, 3.2, 4.1-4.3, 4.5, 5.1, 5.2, 6.1, 6.2	- Understands the purposes, specific functions and key features of common digital systems and tools, and operates them effectively to complete routine tasks - Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for efficiency - Automatically implements standard procedures for routine decisions - Recognises and takes responsibility for addressing predictable problems in familiar work contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPSCP375 Automatically produce complex screen prints	ICPSP375C Automatically produce complex screen prints	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICPSCP375 Automatically produce complex screen prints

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Performance Evidence

Evidence of the ability to:

- produce TWO different complex prints of more than two colours, containing line and tone, using an automatic machine according to job, manufacturer, enterprise and health and safety requirements
- demonstrate use of computerised control, monitoring and data entry systems if available and appropriate.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain any machine adjustments required prior to setting up
- describe machine and feeder maintenance required prior to printing
- describe machine and feeder adjustments required to allow for characteristics of the substrate, including the need to prepare substrate when loading the feeder
- outline the procedure to confirm the screen sequence of colour, ink, substrate and squeegee or flood coater prior to printing
- describe the system for setting the feed board and loading substrate and the adjustment of the stock feed system
- describe the method for ensuring the substrate is fed into the machine at the required production speed without damage, distortion or variation in position
- outline the criteria for selecting the right substrate for the job and the ink and substrate compatibility
- describe the characteristics of solvents and ink additives and compatibility to this ink system
- explain the process for the correct positioning, registering and screen locking, and outline correct positioning of the squeegee or flood coater

- describe factors that contribute to the adjustment requirements of the frame
- explain the shore hardness of the squeegee blade and the process of selection
- explain the relationship between ink deposit, squeegee speed and belt speed and temperature of the drying or curing unit
- explain the health and safety requirements when working with infra-red or UV curing units
- summarise routine maintenance to be undertaken on this drying or curing unit
- outline the ink drying or ink curing characteristics of different substrates
- explain the health and safety concerns when using an automatic machine
- describe the assessment of colour to ensure it conforms to job specifications and other important checks to be completed on the initial proof run before continuing
- describe the ongoing evaluation of print quality and substrate feeding during the run
- identify ideal printing speeds for different substrates
- describe the effect of humidity on the substrate
- outline the ongoing maintenance of the correct viscosity of ink during the run and methods to determine if print is dried or cured before handling
- describe the handling of the output to prevent offsetting of ink, blocking, sweating or rewetting of ink
- describe the effect that weather conditions could have on output capacity
- explain the importance of determining the exact output count and recording production details on the job sheet
- describe the health hazards associated with ink or solvents
- outline the correct procedure for removing the ink without damaging the screen
- outline the correct method of cleaning squeegees or flood coaters, machine and surrounding area and the maintenance that is required on the machine after printing is completed
- identify required manuals, safety and other documentation and briefly outline the relevant information in each source.

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 and automatic printing machines.

Assessors must satisfy NVR/AQTF assessor requirements.

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