



Australian Government

ICPPRN341 Set up for basic pad printing

Release: 1

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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 set up basic pad printing for routine print jobs and includes setting up and adjusting manual pre- and post-treatment processes and conducting a proof.

It applies to individuals who work under direct supervision, and have responsibility to prepare materials and monitor and run equipment and machinery to ensure the production process is maintained

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

Unit Sector

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. Confirm job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked
2. Install tampons (printing pads) into machine	2.1 Appropriate tampons are selected according to job specifications 2.2 Tampons are secured into machine
3. Set up fixtures onto	3.1 Appropriate fixtures are selected and secured to xy table

ELEMENT	PERFORMANCE CRITERIA
machine bed	3.2 Height of machine bed is adjusted to suit size of object to be printed 3.3 Xy table of machine bed is adjusted to suit position of image on object
4. Select and prepare inks and additives	4.1 Inks and additives are selected according to job specifications and end-user requirements 4.2 Quality and suitability of inks and additives are checked and appropriate action is taken 4.3 Inks and additives are prepared according to work health and safety (WHS) requirements and manufacturer's/supplier's instructions with suitable precautions to minimise waste 4.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and routine job specifications 4.5 Formulation of ink, colour match and approved colour are appropriately recorded 4.6 Inks and additives are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions to prevent damage and hazards to personnel and prolong shelf life
5. Set up machine for basic pad printing	5.1 Plate holder is set up and adjusted according to job specifications 5.2 Appropriate plate and plate holder are selected and plate is secured into plate holder 5.3 Tampons are set up and adjusted according to job specifications 5.4 Spatula and doctor blade are set up and adjusted according to requirements of the pad printing process and routine job specifications OR 5.5 Ink cup is set up and adjusted according to job specifications
6. Set up manual pre- and post-treatment processes	6.1 Manual loading is set up according to routine object requirements and job specifications 6.2 Manual pre-treatment is set up to suit routine object and according to job specifications 6.3 Drying racks are set up to suit object and according to job specifications

ELEMENT	PERFORMANCE CRITERIA
7. Conduct proof run	7.1 Material to be used for proof is organised correctly 7.2 Machine is operated according to manufacturer's requirements and enterprise procedures to produce a specified proof 7.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 7.4 Production does not commence without client approval or authority where appropriate 7.5 Results are interpreted and adjustments are carried out according to product and machine specifications

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, 2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3-5.5, 6.1-6.3, 7.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	4.5, 7.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3-5.5, 6.1-6.3, 7.3-7.5	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	4.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1, 4.1-4.4, 4.6, 5.1-5.5, 6.1-6.3, 7.2-7.5	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with WHS, legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.1, 4.1, 4.3, 4.4, 4.6, 5.1, 5.3-5.5, 6.1-6.3, 7.3-7.5	- Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability - Understands what to communicate, with whom and how, in routine work situations

Get the work done	1.2, 1.3, 2.1, 2.2, 3.1-3.3, 4.1-4.4, 4.6, 5.1-5.5, 6.1-6.3, 7.1-7.3, 7.5	• Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency • Plans, identifies and assembles resources required to complete tasks • Responds to predictable problems and implements standard or logical solutions • Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN341 Set up for basic pad printing	ICPPRN341C Set up for basic pad printing	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 ICPPRN341 Set up for basic pad printing

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Performance Evidence

Evidence of the ability to:

- correctly set up a pad printing machine on TWO occasions (if possible on different substrates) for routine print jobs to meet enterprise procedures, manufacturer's and job specifications; including setting up manual pre- and post-treatment processes and completing a proof run.
- demonstrate all safety devices on the machine.

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:

Substrate identification

- identify what class of substrate the (given) object came from

Ink selection

- explain how to determine if an ink is appropriate to use with a particular substrate
- explain how to determine if an ink is mixed to the correct viscosity
- explain the pot life of a two-component ink

Pad selection

- explain how to determine the correct pad shape for applications
- describe what effect pad shape and hardness has on print quality
- outline the ideal storage conditions for pads

Plate selection

- explain how to determine the correct plate type for given applications

Doctor blades

- explain work health and safety (WHS) concerns of setting presses and doctor blades
- describe how to adjust the machine so the doctor blade operates correctly
- describe the effect of a damaged doctor blade

Pre- and post-treatment requirements

- explain WHS concerns of using pre- and post-treating substrates
- explain how to pre-treat an oily surface to ensure it is ready for printing

Print problem identification and correction

- identify causes of and solutions for common print problems (eg hairlines around image, loss of density in the centre of a solid image, fine lines of ink running through image, distortion of image)

Information sources

- identify machine manuals, safety and other documentation relevant to this task, where are they kept and the information contained.

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 printing field of work and include access to:

- relevant facilities, materials and equipment
- pad printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

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