



Australian Government

ICPPRN321 Set up for basic gravure 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 routine gravure printing for routine print jobs.

It applies to individuals who prepare material, and monitor and run equipment and machinery, and apply solutions to a defined range of unpredictable problems. Individuals may also provide leadership and guidance to members of their team.

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 routine 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. Set up reels	2.1 Unwind and rewind reels are set up and adjusted according to job specifications 2.2 Webbing procedures are carried out according to job specifications 2.3 Web-control system is set up and adjusted according to job

ELEMENT	PERFORMANCE CRITERIA
	specifications 2.4 Reels are spliced/joined according to job specifications 2.5 Printed web viewing devices are set up and adjusted according to job specifications 2.6 Folder and sheeter are set up and adjusted according to job specifications 2.7 Set off / marking prevention devices are set up and adjusted according to job specifications
3. Select and prepare inks and additives (basic)	3.1 Inks, dyes or additives are selected according to job specifications and end-user requirements 3.2 Quality and suitability of inks, dyes or additives are checked and appropriate action is taken 3.3 Inks, dyes and additives are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste 3.4 Correct colour and weight/volume of ink are mixed and prepared to match requirements of the printing process and job specifications 3.5 Formulation of ink, colour match and approved colour are appropriately recorded 3.6 Inks, dyes and additives are appropriately labelled, handled and stored according to manufacturer's/ supplier's instructions to prevent damage and hazards to personnel and to prolong shelf life
4. Set up machine for basic gravure printing	4.1 Gravure cylinders are selected, installed, set up and adjusted according to job specifications 4.2 Impression roller is set up and adjusted according to job specifications 4.3 Inking system / doctor blade is set up and adjusted according to the gravure process and job specifications 4.4 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is operated according to manufacturer's and enterprise procedures to produce a specified proof 5.3 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 5.4 Production does not commence without client OK or authority

ELEMENT	PERFORMANCE CRITERIA
	where appropriate 5.5 If necessary, results are interpreted and adjustments made 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, 2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.5, 5.4	Enters routine data associated with production processes and enterprise procedures
Oral Communication	2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.3-5.5	Participates effectively in spoken interactions by using strategies to confirm, clarify or repair understanding
Numeracy	3.4	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	1.1, 1.2, 2.1-2.7, 3.1-3.4, 3.6, 4.1-4.4, 5.2-5.5	- 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	2.1-2.7, 3.1, 3.3, 3.4, 3.6, 4.1-4.4, 5.3-5.5	- 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, 2.1-2.7, 3.1-3.4, 3.6, 4.1-4.4, 5.1, 5.2, 5.5	- 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
ICPPRN321 Set up for basic gravure printing	ICPPR321C Set up for basic gravure 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 ICPPRN321 Set up for basic gravure printing

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Performance Evidence

Evidence of the ability to:

- correctly demonstrate all safety devices on the machine
- set up a press on TWO occasions for basic gravure printing (if possible including at least one in-line process) according to manufacturer's specifications and enterprise procedures, conduct a proof run and adjust settings to ensure production speeds are attained.

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:

Job requirements

- describe what to do if vital information is missing from the job ticket
- explain materials required prior to set up

Cylinders

- identify correct cylinders for each job
- identify important considerations when handling gravure cylinders
- describe what parts of the unit to check to ensure cylinder is installed correctly

Reel in-feed on the machine

- list work health and safety (WHS) considerations of operating reel in-feed and delivery systems
- identify how the material printing side is selected
- describe the effect of low web tension on the print
- identify other types of web-splices that could be used for the job

Delivery system on the machine

- list risks linked with the rewind of the machine
- explain the effect of excessive web tension at the rewind of the machine

Selection and preparation of inks and additives

- explain environmental and WHS risks related to inks and additives
- describe how ink suitability is matched to a particular job
- describe what happens if the ink is too viscose
- explain how an ink that is slightly light can be modified to meet the needs of the job
- identify available methods to check for correct ink colour
- identify who passes the colour prior to running the job

Machine set-up

- identify necessary precautions when handling doctor blades
- explain how machine specifications are determined for each individual job
- list steps to ensure ink levels in the inking system are maintained at an appropriate level
- outline how to determine if the inking system has been adjusted appropriately

Basic in-line processes

- list steps to incorporate in-line process into the make ready
- explain how equipment used in in-line processing is protected against damage during set-up

Proofing and adjustment

- explain procedures to have the print approved
- describe quality control measurements to apply to the proof to test against known standards
- identify what to check on the initial print prior to running
- explain how to determine settings adjustments
- describe what process is used to plot success of the machine adjustment
- outline how final results are recorded for future reference

Information sources

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

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:

- special purpose tools, equipment and materials
- a gravure printing machine with in line units.

Assessors must satisfy NVR/AQTF assessor requirements.

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