



**Australian Government**

# **ICPPRN313 Set up for basic flexographic printing**

**Release: 2**

## ICPPRN313 Set up for basic flexographic printing

### Modification History

Release	Comments
Release 2	This version released with ICP Printing and Graphic Arts Training Package Version 2.0.  Version created to amend outdated application section.
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 machines for routine flexographic printing.

It applies to individuals who work as print machinists and prepare material, and monitor and run equipment and machinery, and apply solutions to printing difficulties as they arise.

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 are checked 1.4 Proofed job is checked for conformance with job specifications

ELEMENT	PERFORMANCE CRITERIA
2. Set up delivery systems	<p>2.1 Delivery systems are correctly set up and adjusted according to job specifications</p> <p>2.2 Substrate is added to and removed from process according to job specifications</p>
3. Select and prepare inks and solvents	<p>3.1 Inks and solvents are selected according to routine job specifications and end-user requirements</p> <p>3.2 Quality and suitability of inks and solvents are checked and appropriate action taken</p> <p>3.3 Inks and solvents are prepared according to work health and safety (WHS) requirements, and manufacturer's/supplier's instructions with suitable precautions to minimise waste</p> <p>3.4 Correct colour and weight/volume of ink are mixed and viscosities checked and modified according to press requirements and routine job specifications</p> <p>3.5 Ink formula and approved colour drawdowns are appropriately recorded</p> <p>3.6 Inks and solvents are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions and relevant hazardous liquids storage regulations</p>
4. Set up machine for basic flexographic printing	<p>4.1 Flexographic plate cylinders are installed and register adjustments centred</p> <p>OR</p> <p>4.2 Sleeves are installed in press and register adjustments made</p> <p>OR</p> <p>4.3 Plate mounting sheets are mounted on cylinders in press and register adjustments made</p> <p>4.4 Plate cylinders are gauged up or pre-set to impression</p> <p>4.5 Inking system is set up and roller nips/blades are set correctly</p> <p>4.6 Ink circulation is maintained at correct level and flow for machine requirements</p> <p>4.7 Viscosities are adjusted according to job specifications</p> <p>4.8 Air volume and drier temperatures or curing systems are selected to suit inks, substrate, solvents and according to job specifications</p> <p>4.9 Air volume is adjusted between colours to maximise drying and minimise air overspill</p>

ELEMENT	PERFORMANCE CRITERIA
5. Set up in-line units for basic process(es)	<p>5.1 Minor in-line printing/converting/binding units are set up for basic process(es) and adjusted to suit machine requirements and job specifications</p> <p>5.2 Assistance is given in set-up of major in-line printing/converting/binding units.</p>
6. Conduct print run	<p>6.1 Material to be used for print is organised correctly</p> <p>6.2 Press is set up and operated according to WHS guidelines</p> <p>6.3 Print impressions are set to minimum kiss impression</p> <p>6.4 Web tensions are correctly set at unwind, between stations and rewind</p> <p>6.5 Print is checked for register</p> <p>6.6 Drying is checked as sufficient to key ink to the substrate</p> <p>6.7 Viscosities are adjusted to obtain correct colour at proof speed and checked against colour matching system</p> <p>6.8 Substrate is checked against job specifications</p>
7. Organise print inspection and/or testing	<p>7.1 Print is visually inspected and/or tested, or laboratory testing is organised according to enterprise procedures</p> <p>7.2 Production does not commence without client OK where appropriate</p>
8. Readjust settings to production speed	<p>8.1 Production speed print results are interpreted and appropriate adjustments are made to press, ink and substrate settings</p> <p>8.2 Adjustments are made according to product specifications and press performance</p> <p>8.3 Web is spliced at production speed and further samples are obtained for quality inspections at appropriate intervals where applicable</p> <p>8.4 Press setting is documented and samples are retained</p>

## 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, 1.4, 3.1, 3.3, 3.4, 3.6, 4.7, 4.8, 5.1, 6.8, 8.2	<ul style="list-style-type: none"> <li>Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications</li> </ul>
Writing	3.5, 3.6, 8.4	<ul style="list-style-type: none"> <li>Enters routine data associated with production processes and enterprise procedures</li> </ul>
Oral Communication	1.4, 3.4, 4.7, 4.8, 5.1, 5.2, 6.8, 7.1, 7.2, 8.3	<ul style="list-style-type: none"> <li>Speaks clearly using appropriate vocabulary, tone and pace to report faults and discrepancies</li> </ul>
Numeracy	3.4, 4.6, 4.8, 6.8, 8.1	<ul style="list-style-type: none"> <li>Interprets and analyses a range of mathematical information used in familiar and routine tasks</li> </ul>
Navigate the world of work	1.1, 1.2, 1.4, 3.1-3.6, 4.1-4.8, 5.1, 6.1-6.8, 7.1, 8.1-8.3	<ul style="list-style-type: none"> <li>Recognises and follows explicit and implicit protocols and meets expectations associated with own role</li> <li>Recognises and follows all procedures for cleaning and maintenance of equipment, incorporating regulatory requirements and enterprise procedures</li> </ul>
Interact with others	1.4, 3.4, 4.7, 4.8, 5.1, 5.2, 6.8, 7.1, 7.2, 8.3, 8.4	<ul style="list-style-type: none"> <li>Cooperates with others as part of familiar routine activities, and contributes to specific activities requiring joint responsibility and accountability</li> <li>Understands what to communicate, with whom and how, in routine work situations</li> </ul>
Get the work done	1.1-1.4, 2.1, 2.2, 3.1-3.4, 3.6, 4.1-4.9, 5.1, 5.2, 6.1-6.8, 7.1, 7.2, 8.1-8.4	<ul style="list-style-type: none"> <li>Determines priorities and sequences steps involved in clearly defined, familiar tasks</li> <li>Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts</li> <li>Follows routine procedures for using digital technology by reading data from electronic monitoring and control systems</li> </ul>

## Range of Conditions

*This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.*

Delivery systems MUST include EITHER:	<ul style="list-style-type: none"> <li>reel</li> </ul> OR <ul style="list-style-type: none"> <li>sheet</li> </ul>
Setting up and adjusting MUST	<ul style="list-style-type: none"> <li>checking reels for treatment levels, coatings,</li> </ul>

include EITHER:	<p>printing side and age of product</p> <ul style="list-style-type: none"> <li>• securing reels on reel shaft</li> <li>• correctly positioning reels on unwind stand</li> <li>• positioning and mounting correctly cut cores on rewind shafts</li> <li>• centring and setting edge guide</li> <li>• setting unwind and rewind tension to suit substrate</li> <li>• setting nip rollers</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• feeder</li> <li>• sheet pick-up and transportation system</li> <li>• transfer system</li> <li>• delivery</li> <li>• sheet transfer and control system</li> <li>• set off / marking prevention devices</li> </ul>
-----------------	---

## Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN313 Set up for basic flexographic printing Release 2	ICPPRN313 Set up for basic flexographic printing Release 1	Updated to amend application	Equivalent unit

## Links

Companion Volume implementation guides are found in VETNet -

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