



Australian Government

ICPPRN413 Set up for complex flexographic printing

Release: 1

ICPPRN413 Set up for complex flexographic printing

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 machines for non-routine flexographic printing. It includes the ability to conduct a proof run and adjust settings to ensure production speeds are attained.

It applies to individuals working as print machinists in the printing and graphic arts industry. They prepare material, set up, monitor and operate equipment and machinery, apply solutions to a defined range of problems associated with the print medium, and analyse and evaluate information from a variety of sources. They may also provide leadership and guidance to others with some limited responsibility for the output of others.

Mounting and demounting plates is covered in ICPPRN411 Mount and demount flexographic plates for complex printing.

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 non-routine job specifications	1.1 Job requirements are read and interpreted from job documentation or production control system 1.2 Set up is planned and carried out correctly in minimum time with minimum wastage 1.3 Availability of all job related components is checked 1.4 Proofed job is checked for conformance with job specifications

ELEMENT	PERFORMANCE CRITERIA
2. Set up reel transportation and delivery system on web-fed machine	2.1 Reels are checked for treatment levels, coatings and printing side, and age of product 2.2 Unwind reels are secured on reel shaft 2.3 Reels are correctly positioned on unwind stand 2.4 Press is webbed for surface or reverse or perfecting printing according to non-routine job specifications 2.5 Edge guide is centred and set to non-routine job specifications 2.6 Unwind tension is set to suit substrate 2.7 Rewind tension is set to suit substrate 2.8 Positively Infinitely Variable (PIV) drive is set for appropriate tensioning of substrate
3. Select and prepare inks and solvents	3.1 Inks and solvents are selected according to job specifications and end-user requirements 3.2 Quality and suitability of inks and solvents are checked and appropriate action is taken 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 3.4 Correct colour and weight/volume of ink are mixed and viscosities checked and modified according to press requirements and non-routine job specifications 3.5 Ink formula and approved colour draw-downs are appropriately recorded 3.6 Inks and solvents are appropriately labelled, handled and stored according to manufacturer's/supplier's instructions and relevant hazardous liquids storage regulations
4. Set up machine for complex flexographic printing	4.1 Flexographic plate cylinders are installed, and register adjustments centred OR 4.2 Sleeves are installed in press and register adjustments made OR 4.3 Plate mounting sheets are mounted on cylinders in press and register adjustments made 4.4 Plate cylinders are gauged up or pre-set to impression 4.5 Anilox rollers are selected to suit individual colour and plate reproduction requirements for each unit

ELEMENT	PERFORMANCE CRITERIA
	4.6 Appropriate ink metering system is selected for each unit 4.7 Inking system is set up and roller nips/blades are set correctly 4.8 Ink circulation is maintained at correct level and flow for machine 4.9 Viscosities are adjusted according to job specifications 4.10 Air volume and drier temperatures curing units are selected to suit inks, substrate, solvents and, according to job specifications 4.11 Air volume is adjusted between colours to maximise drying and minimise air overspill
5. Set up in-line units for basic process/es	5.1 Minor in-line printing/converting/binding units are set up for basic process/es and adjusted according to machine requirements and job specifications 5.2 Assistance is given in set-up of major in-line printing/converting/binding units
6. Conduct proof run	6.1 Material to be used for proof is organised correctly 6.2 Press is set up and operated according to WHS guidelines 6.3 Print impressions are set to minimum kiss impression 6.4 Web tensions are correctly set at unwind, between stations and rewind 6.5 Drying is checked as sufficient to key ink to the substrate 6.6 Viscosities are adjusted to obtain correct colour at proof speed and checked against colour matching system 6.7 Substrate is checked against job specifications
7. Organise proof inspection and/or testing	7.1 Proof is visually inspected and/or tested or laboratory testing is organised according to enterprise procedures 7.2 Production does not commence without client approval or authority where appropriate
8. Readjust settings to production speed	8.1 Production speed print results are interpreted and appropriate adjustments are made to press, ink and substrate settings 8.2 Adjustments are made according to product specifications and press performance 8.3 Web is spliced at production speed and further samples are obtained for quality inspections at appropriate intervals 8.4 Press settings are documented and samples are retained

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, 2.4, 2.5, 3.1, 3.3, 3.4, 3.6, 4.9, 4.10, 5.1, 6.7, 8.1, 8.2	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.5, 3.6, 7.2, 8.4	Completes records accurately and according to workplace requirements
Oral Communication	7.2	Participates effectively in spoken interactions using appropriate vocabulary, and employing questioning and listening techniques to gain approvals
Numeracy	3.4, 8.1	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	6.2, 7.1, 7.2	- Complies with legislative requirements and follows organisational policies and procedures relevant to own role - Recognises boundaries of own role responsibilities
Interact with others	5.2, 7.2	- Collaborates with others to complete tasks according to requirements - Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.4, 2.1-2.9, 3.1, 3.2, 3.4, 4.1-4.11, 5.1, 5.2, 6.1-6.7, 7.1, 8.1-8.4	- Takes responsibility for planning and organising own workload using analytical processes to decide on a course of action, and assembles resources required - Implements actions as per instructions, making adjustments if necessary - Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts - Reads data from electronic monitoring and control systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN413 Set up for complex flexographic printing	ICPPR413C Set up for complex flexographic printing	Updated to meet Standards for Training Packages	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>