



Australian Government

ICPPRN4140 Produce specialised flexographic printed product

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 4.0.

Application

This unit describes the skills and knowledge required to produce specialised flexographic printing that needs a certain amount of problem-solving and experimentation with the substrate and press settings.

It applies to skilled individuals working as print machinists in the printing and graphic arts industry who prepare material, set up, monitor, operate and clean equipment and machinery, problem-solve, 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.

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. Maintain specialised flexographic printing process	1.1 Evaluate and adjust flexographic plate and plate cylinder or sleeve condition 1.2 Evaluate and adjust flexographic impression roller condition 1.3 Monitor, evaluate and adjust flexographic inking system, doctor blade and drying systems
2. Maintain specialised production process	2.1 Use machine controls according to job specifications 2.2 Monitor, adjust and verify performance is using the process

ELEMENT	PERFORMANCE CRITERIA
	control system according to enterprise procedures 2.3 Observe, evaluate and adjust ink performance, colour, register and position of print throughout production run
3. Tune and adjust machinery	3.1 Review idiosyncrasies of machines make adjustments or undertake tuning to compensate, or exploit the idiosyncrasy, within manufacturer specifications 3.2 Evaluate options to determine method of production 3.3 Conduct test run and confirm options and settings meet quality requirements 3.4 Document options and recommendations according to enterprise procedures 3.5 Provide instruction on new practices to machine operator or finisher, as required
4. Troubleshoot machinery and material problems	4.1 Recommend and implement corrective and preventive action as required 4.2 Communicate changes to designated personnel 4.3 Monitor changes and confirm improvement to production efficiency 4.4 Report ongoing problems according to enterprise procedures
5. Conduct shutdown of production process	5.1 Follow shutdown sequence according to manufacturer specifications and enterprise procedures 5.2 Remove solid and liquid waste from operating area and recycle and dispose of, as required, according to regulatory requirements and enterprise procedures 5.3 Clean and disengage all required parts of machinery used in printing process according to manufacturer specifications and enterprise procedures 5.4 Complete required production records and enterprise documentation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Description
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Writing	• Completes records, forms and other documents and according to workplace requirements
Self-management	• Complies with enterprise procedures relevant to own role
Teamwork	• Collaborates and cooperates with others to achieve joint outcomes • Contributes to workgroup discussions using accepted conventions
Planning and organising	• Determines priorities and sequences steps involved in clearly defined, familiar tasks and identifies and assembles required resources • Makes rapid decisions when required, drawing on in-depth understanding of a situation and experience of decision-making
Problem solving	• Responds to predictable problems and implements standard or logical solutions related to role in the immediate work environment
Technology	• Reads data from electronic monitoring and control systems

Unit Mapping Information

Supersedes and is equivalent to ICPPRN414 Produce specialised flexographic printed product.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICPPRN4140 Produce specialised flexographic printed product

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- produce specialised flexographic printed products for two jobs.

In the course of the above the candidate must:

- operate production process in association with fellow workers and according to enterprise procedures and planned daily schedule
- follow work health and safety (WHS) requirements, manufacturer specifications and enterprise procedures
- anticipate production difficulties and take preventive action to prevent occurrence.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- enterprise and manufacturer procedures, and WHS requirements for:
 - operating the delivery system, rewinding and sheeting
 - machine shutdown
- causes and correction methods of various machine issues such as:
 - reel wander and an out of centre reel
 - web breaks at the unwind unit
 - sheet cut-off wander
 - substrate distortion
- difference between a 'flying paster' and 'zero speed' type reel-stand
- safety feature in the delivery system for web jams
- effect of:
 - poorly adjusted nip rollers in rewinding and sheeting
 - plate lifts on the leading edge during a print run

- too much reducer in the ink
- an incorrect drying temperature in the chillers or on finished product
- eating or drinking near the machine while using UV inks
- excessive pressure on the slitters
- inadequate work communication on the flexographic machine
- increases in relative humidity in the press room on the substrate
- procedures for:
 - handling newly delivered substrates to the press room
 - reporting machine operating problems and calling service personnel to resolve them
 - sorting waste
 - labelling and storage of inks, materials, and printed jobs
 - labelling of printed product prior to removal from the press room
- cause of ink foaming in the ink tray and UV ink drying
- actions reducing doctor blade wear
- purpose of removing solvents from the final ink film
- relationship between driers and set off and marking
- purpose of frequently examining job in-line components
- consistency checks for the punching unit
- safety features in the organisation that maintain effective production
- enterprise personnel responsible and ramifications for removal of machine guards and disconnection of micro switches
- measurements besides optimum solid ink density for assessing print quality
- required method of checking register during a production run
- immediate action required when production problems are anticipated, and to eliminate further processing of unacceptable printed product
- advantages of keeping reusable waste and labelling and storing excess materials
- industry communication standards for clients, and procedures clients should follow to approve a printed product
- labelling and storage procedures of excess inks and materials
- operations required for printed reels after removal from the printing machine
- use of completed records in the final job analysis, and their benefits in considering production of future jobs
- manufacturer manuals, enterprise procedures and work health and safety documentation, including their location and purpose.

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
- flexographic press.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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