



Australian Government

ICPPRN414 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 1.0.

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 Flexographic plate and plate cylinder or sleeve condition is monitored, evaluated and adjusted to ensure quality of printed product meets the approved proof standard 1.2 Flexographic impression roller condition is monitored and evaluated to ensure the quality of printed product meets the approved proof standard 1.3 Flexographic inking system and doctor blade condition is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the approved proof standard

ELEMENT	PERFORMANCE CRITERIA
	1.4 Drying systems are monitored, evaluated and adjusted to ensure quality of the specialised printed product meets the approved proof standard
2. Maintain specialised production process	2.1 Production process is maintained in association with fellow workers and according to enterprise procedures and planned daily schedule 2.2 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.3 Manual and/or automatic control is used according to job specifications 2.4 Performance is monitored, adjusted and verified using the process control system according to enterprise procedures 2.5 Ink performance, colour, register and position of print are monitored, evaluated and adjusted throughout production run
3. Tune and adjust machinery	3.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or exploit the idiosyncrasy, within manufacturer's specifications 3.2 Options are assessed to determine most effective/efficient method of production, ensuring highest quality and yield from machinery 3.3 Test run confirms correct options and settings or the need for further adjustment or tuning to meet quality standards 3.4 Options and recommendations are documented for future reference according to enterprise procedures 3.5 Instruction on new practices is provided to machine operator or finisher, if required
4. Troubleshoot machinery and material problems	4.1 Corrective or preventive action is recommended and implemented where appropriate 4.2 Changes are communicated to relevant personnel in a logical and easily understood manner 4.3 Changes are monitored to confirm improvement to production efficiency 4.4 Ongoing problems are reported according to enterprise procedures
5. Conduct shutdown of production process	5.1 Correct shutdown sequence is followed according to manufacturer's specifications and enterprise procedures

ELEMENT	PERFORMANCE CRITERIA
	5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Reels and cores are removed from press 5.4 Unused ink is drained back into containers and correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.5 Solid and liquid waste is removed from operating area and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.6 Product is removed from operating area

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	2.2, 2.3, 3.1, 5.1, 5.4	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	3.4, 3.5, 4.1, 4.4, 5.4	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	2.1, 3.5, 4.1, 4.2, 4.4, 5.2	Participates effectively in discussions using appropriate vocabulary, questioning and listening skills
Navigate the world of work	2.1, 2.2, 3.4, 4.4, 5.1, 5.2, 5.4, 5.5	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	2.1, 3.5, 4.1, 4.2, 4.4, 5.2	- Collaborates and cooperates with others to achieve joint outcomes - Contributes to workgroup discussions using accepted conventions - Selects and uses appropriate communication practices when reporting issues
Get the work done	1.1-1.4, 2.1-2.5, 3.1, 3.4, 4.1-4.4, 5.1-5.6	- 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 • Responds to predictable problems and implements standard or logical solutions related to role in the immediate work environment • Reads 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
ICPPRN414 Produce specialised flexographic printed product	ICPPRN414C Produce specialised flexographic printed product	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 ICPPRN414 Produce specialised flexographic printed product

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Performance Evidence

Evidence of the ability to:

- safely monitor production output and make necessary adjustments to maintain print quality on a flexographic machine while producing a complex print on TWO occasions (if possible using different substrates and, if possible, including at least two in-line processes) according to job specifications, enterprise procedures and work health and safety (WHS) guidelines.

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:

- identify causes of reel wander and the print fault that results from the reel being run out of centre
- identify causes of web breaking at the unwind unit, and possible faults in the unwind section that cause a web break
- outline the difference between a 'flying paster' and 'zero speed' type reel-stand
- outline WHS risks associated with rewinding and sheeting, and identify the safety feature in the delivery system for when the web jams up
- identify causes of sheet cut-off wander
- outline the effect of poorly adjusted nip rollers when rewinding and sheeting, and what happens if the plate lifts on the leading edge during a print run
- describe the effect on printed product of a build-up of ink on the impression cylinder, and the cause of ink foaming in the ink tray
- identify the effect of too much reducer in the ink
- name the action that reduces doctor blade wear
- describe why all solvents need to be removed from the final ink film
- identify link between driers and set off and marking and the causes of UV ink drying

- describe faults that cause substrate distortion
- outline the effect in the chillers if the drying temperature is too low, and the effect of incorrect drying temperature on the finished product
- describe the effect of eating or drinking near the machine when using UV inks
- describe the need to frequently examine in-line components of the job
- outline consistency checks for the punching unit
- describe the result of excessive pressure on the slitters
- outline safety features within the organisation that aid in maintaining effective production
- outline the legal responsibility for removal of machine guards and/or disconnection of micro switches
- describe the effect of inadequate communication within the work team on a flexographic printing machine
- describe ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- outline other measurement, besides optimum solid ink density, to assess print quality
- describe the most accurate method of checking register during a production run
- outline the need to take immediate action when production problems are anticipated, and action taken to eliminate further processing of unacceptable printed product
- outline the result to the substrate if relative humidity is increased in the press room, and how to care for a newly delivered substrate to the press room
- describe the process for waste sorting and the advantage of keeping reusable waste
- list industry standards to enhance effective communication with clients, and procedures clients should follow to approve a printed product
- identify times when it is necessary to call service personnel to correct a machine problem
- outline enterprise procedures in place to report any machine operating problems, and what happens if correct shutdown procedures are not followed with fellow workers
- describe advantages of proper labelling and storage of excess inks and materials
- describe the process for clear labelling of printed product prior to removal from the press room
- outline operations required for printed reels after they are removed from the printing machine, and how to store printed jobs after they are removed from the printing machine
- outline use of completed records in the final analysis of the job, and benefits of comprehensive records when considering production of future jobs
- identify machine manuals, safety and other documentation relevant to this task, where are they kept and information included in these documents.

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, including a reel-fed flexographic press.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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