



Australian Government

ICPPRN452 Produce specialised relief 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 a specialised relief printed product operating a platen, cylinder or rotary printing machine.

It applies to individuals who use specialised knowledge to problem-solve and experiment to obtain optimal results and a quality product with minimum production problems or downtime.

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 relief printing process	1.1 Relief polymer forme or plate cylinder condition is monitored, evaluated and adjusted to ensure quality of the specialised printed product meets the sample sheet standard 1.2 Relief polymer impression surface condition is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.3 Relief polymer inking system is monitored, evaluated and adjusted to ensure quality of specialised printed product meets the sample sheet standard 1.4 Drying systems are monitored, evaluated and adjusted to ensure quality of specialised printed product meets the approved proof standard

ELEMENT	PERFORMANCE CRITERIA
2. Maintain production process	2.1 Production process is operated in association with fellow workers and according to enterprise procedures and planned daily schedule 2.2 If required, in-line printing/converting/binding/finishing processes are monitored and adjusted to ensure quality of product meets the approved proof standard 2.3 Production is maintained according to work health and safety (WHS) requirements, manufacturer's specifications and enterprise procedures 2.4 Manual and/or automatic control is used as required according to job specifications 2.5 Performance is monitored and verified using the process control system according to enterprise procedures 2.6 Ink performance, colour, register and position of print are monitored and adjusted throughout production run 2.7 Production difficulties are anticipated and preventive action is taken to prevent occurrence by timely intervention 2.8 Process adjustments to eliminate problems are reported according to enterprise procedures 2.9 Waste is sorted according to enterprise procedures
3. Tune and adjust machinery	3.1 Idiosyncrasies of machines are reviewed and adjustments or tuning undertaken to compensate, or to 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 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

ELEMENT	PERFORMANCE CRITERIA
	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 5.2 Shutdown is conducted in association with fellow workers and in compliance with WHS requirements 5.3 Unused ink is correctly labelled and stored according to manufacturer's/supplier's specifications and enterprise procedures 5.4 Solid and liquid waste is removed from operating area, and recycled or disposed of, where required, according to regulatory requirements and enterprise procedures 5.5 All product is removed from operating area 5.6 Machine faults requiring repair are identified and reported, according to enterprise procedures 5.7 Repair/adjustment is verified prior to resumption of operations

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, 2.4, 2.5, 3.1, 5.1-5.3	Recognises and interprets text to establish job requirements from information contained within relevant instructions, procedures and specifications
Writing	2.8, 3.4, 4.1, 4.4, 5.3, 5.6, 5.7	Completes records, forms and other documents accurately and according to workplace requirements
Oral Communication	2.1, 2.8, 3.5, 4.1, 4.2, 4.4, 5.2, 5.6	Participates effectively in discussions using appropriate vocabulary, questioning and listening skills
Navigate the world of work	2.1, 2.3, 2.5, 2.8, 2.9, 3.4, 4.4, 5.1-5.4, 5.6	Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with	2.1, 2.8, 3.5, 4.1,	Collaborates and cooperates with others to achieve joint outcomes

others	4.2, 4.4, 5.2, 5.6	- Contributes to workgroup discussions using accepted conventions - Selects and uses appropriate communication practices when reporting issues
Get the work done	1.1-1.4, 2.1-2.7, 2.9, 3.1-3.5, 4.1, 4.3, 5.1-5.7	- Determines priorities and sequences steps involved in complex tasks and identifies and assembles required resources - Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans, and begins to look behind obvious symptoms to redefine problems and identify underlying causes - Recognises potential of new approaches to enhance work practices - Understands purposes, specific functions and key features of digital systems and tools and operates them effectively

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN452 Produce specialised relief printed product	ICPPR452C Produce specialised relief 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 ICPPRN452 Produce specialised relief printed product

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Performance Evidence

Evidence of the ability to:

- operate a platen, cylinder or rotary printing machine to produce a specialised printed product that maintains product quality standards, including anticipating and rectifying production problems, minimum downtime, and cleaning and shutting down the machine according to work health and safety (WHS) guidelines
- access and use information relevant to the task from a variety of information sources
- monitor production output and make necessary adjustments to maintain print quality on a relief printing machine while producing a specialised 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 the performance criteria.

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:

- outline major WHS concerns of setting up the reel transportation system
- identify reel wander cause
- explain cause of web break at the unwind unit
- identify a print fault resulting from the reel being run out of centre
- describe possible faults in the unwind section that can cause a web break
- outline WHS concerns of operating the sheet transportation system
- describe the result of worn suckers at the feeder suction head
- describe sheet detection types for particular machines
- describe how much movement the sheet should have when being registered by the side lay
- explain the cause of mis-register of the sheet at the feeder
- identify visible signs of the sheet being registered in the feeder

- explain the gripper malfunction effect on sheet control and transfer
- describe adjustment of the sheet transfer mechanisms
- describe what causes the feeder stack to become uneven
- describe what happens if the feeder stack loaded unevenly
- explain how to rectify unevenness of the feeder stack
- outline WHS risks associated with rewinding and sheeting
- identify a safety feature in the delivery system for when the web jams up
- explain sheet cut-off wander
- describe the effect of poorly adjusted nip rollers when rewinding and sheeting
- describe the effect machine speed has on sheet delivery
- explain the advantage of spraying moving sheets with anti-set off powder in the delivery
- identify items in the delivery that can cause marking of the printed image
- outline remedial steps to eliminate marking of the printed image
- explain faults caused by from incorrectly set grippers in the transfer section of a machine
- describe adjustments to devices to maintain sheet control in the delivery
- describe what happens if the plate lifts at the grip edge during a print run
- describe the effect on the printed product of build-up of ink on the impression cylinder
- explain what causes ink to lie back in the duct
- describe how to rectify the problem of paper surface picking
- explain the cause of diminished impression during the print run
- explain what causes the plate surface to prematurely wear during production
- describe the effect of eating or drinking near the machine when using UV inks
- explain the link between driers and set off and marking
- explain what causes UV ink to dry
- explain the cause of substrate blistering
- describe the effect of incorrect drying temperature on the finished product
- describe the effect of inadequate communication within the work team on a lithographic printing machine
- outline safety features within the organisation that aid in maintaining effective production
- outline ramifications if machine guards are removed and/or micro switches are disconnected on a machine
- explain legal responsibilities relating to removal of machine guards and/or disconnection of micro switches
- identify other measurement, besides optimum solid ink density, to assess print quality
- describe the most accurate method of checking register during a production run
- explain reasons to take immediate action when production problems are anticipated
- identify actions taken to eliminate further processing of unacceptable printed product
- describe the effect on a stack of paper if relative humidity is increased in the press room
- outline the procedure to care for a newly delivered skid of paper to the press room
- explain steps involved in waste sorting
- identify advantages of keeping reusable waste
- outline industry standards to enhance effective communication with clients
- identify necessary procedures clients should follow to approve a printed product

- identify situations when it is necessary to call service personnel to correct a machine problem
- identify enterprise procedures in place to report any machine operating problems
- explain the result if correct shutdown procedures were not followed
- explain the need for correct shutdown procedures conducted with fellow workers
- identify advantages of proper labelling and storage of excess inks and materials
- explain reasons for clear labelling of printed product prior to removal from the press room
- describe the use of completed records in final analysis of the job
- outline benefits of comprehensive records when considering production of future jobs
- identify machine manuals, safety and other documentation relevant to this task, where they are 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
- platen, cylinder or rotary printing machine.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

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