



Australian Government

ICPPRN471 Set up for complex coating

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 set up non-routine coating that includes set up of rollers and the reel or sheet systems for coating a range of carbon, carbonless, latex, wax, resin and metallic coatings, aqueous and UV varnishes and machine varnishes.

It applies to individuals who use specialised knowledge and planning, organising and problem-solving skills to ensure production speeds are attained and quality standards are met.

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 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 and in minimum time 1.3 Availability of all job related components is checked
2. Set up delivery systems	2.1 Delivery systems are set up and adjusted according to job specifications 2.2 Substrate is added to and removed from process according to job instructions

ELEMENT	PERFORMANCE CRITERIA
3. Select and prepare coating	3.1 Coating is selected according to job specifications and end-user requirements 3.2 Quality and suitability of coating is checked and appropriate action taken 3.3 Coatings and additives 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 weight/volume of coating is prepared to match requirements of the job specification and coating process 3.5 Coating viscosity is confirmed as correct for the job 3.6 Formulation of coating is appropriately recorded
4. Set up machine for coating	4.1 Appropriate rollers/cylinders are selected and secured to the machine and set 4.2 Application system is set up and adjusted according to job specifications 4.3 Appropriate anilox roller is chosen, and installed to manufacturer's specifications 4.4 Set doctor blades to manufacturer's specifications 4.5 Coating delivery system is set up with correct flow and return flow determined by air pressure or pump speeds and adjusted according to job specifications 4.6 Coating blanket is cut or a plate installed for non-image areas 4.7 Blanket or plate packing is checked as suitable to the job 4.8 Coating temperature is checked and deemed suitable for the job 4.9 Drying system is set up and adjusted according to job specifications
5. Conduct proof run	5.1 Material to be used for proof is organised correctly 5.2 Machine is set up and operated, and roller and pressure settings are checked, to produce a specified proof according to WHS requirements, manufacturer's specifications and enterprise procedures 5.3 Proof is visually inspected and/or tested or laboratory testing organised according to enterprise procedures 5.4 Production does not commence without client approval or authority where appropriate 5.5 Results are interpreted and adjustments are carried out

ELEMENT	PERFORMANCE CRITERIA
	according to product and machine specifications to determine adjustment requirements

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, 3.1, 3.3, 3.4, 4.2-4.5, 4.9, 5.5	Recognises and interprets text to establish job requirements from information contained within relevant procedures and specifications
Writing	3.6, 5.4	Completes records accurately and according to workplace requirements
Oral Communication	5.4	Participates effectively in spoken interactions using appropriate vocabulary, questioning and listening techniques to gain approvals
Numeracy	3.4, 4.5	Interprets and analyses a range of mathematical information used in familiar and routine tasks
Navigate the world of work	3.3, 5.2-5.4	- Recognises and follows explicit and implicit protocols and meets expectations associated with own role - Complies with legislative requirements and follows organisational policies and procedures relevant to own role
Interact with others	5.4	Follows accepted communication practices and protocols when seeking approval
Get the work done	1.1-1.3, 3.1-3.5, 4.1-4.6, 4.9, 5.1-5.3, 5.5	- Plans, identifies and assembles resources required to complete tasks - Determines priorities and sequences steps involved in clearly defined, familiar tasks - Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment - Reads data from electronic monitoring and control systems

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:	• reel OR • sheet
Setting up and adjusting MUST include EITHER:	• unwind • webbing procedures • splicing/joining reels • print web viewing devices • set off / marking prevention devices OR • feeder and delivery • sheet pick-up and transportation system • transfer and control systems • set off / marking prevention devices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN471 Set up for complex coating	ICPPRN471C Set up for complex coating	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 ICPPRN471 Set up for complex coating

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Performance Evidence

Evidence of the ability to:

- set up for THREE complex coating operations (one spot coating, one overall coating and one fine detail, using three different coatings of which one must be metallic, and include at least one in-line process), including:
 - setting up rollers and reel or sheet systems for coating a range of carbon, carbonless, latex, wax, resin and metallic coatings, aqueous and UV varnishes and machine varnishes
- conduct a proof run and adjusting settings to ensure production speeds are attained
- find and use information relevant to the task from a variety of information sources.

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:

- describe key information on the work ticket listing type of coating required
- describe what to do if vital information is missing from the job ticket
- list checks to do prior to set up (availability of materials etc.)
- describe how to choose the coating side of material
- describe the effect of offside lay selection on the job
- explain how to carry out a register check

For reel systems only

- describe the effect of:
 - low web tension on the print
 - inefficient web splices

- explain how to:
 - determine reel position for the job
 - check for a web break
- identify safety risks associated with rewind of the machine
- outline the effect of excessive web tension at rewind of the machine

For sheet systems only

- explain how to:
 - determine sheet position for the job
 - select appropriate front lays
 - check a missing or late sheet
- explain use of a two-sheet cut out on most feeders (sheet)
- describe the effect of:
 - not enough coating on a sheet
 - excessive temperature on the sheet
- describe the effect too much vacuum on the slow-down wheels has on the job
- describe how to determine position of register or bustle wheels
- describe the effect excessive jogging has on the stack
- identify major WHS concerns when setting up the sheet or reel transportation system
- identify WHS concerns relevant to the use of coatings
- list types of coatings and their applications
- explain suitability of the coating for the job
- explain how the coat adheres to the product
- identify the amount of coating required
- describe the range of viscosities to run with on an aqueous coating
- describe the effect of incorrect viscosity on coating
- explain how to adjust viscosity of a coating
- describe methods to solidify coating
- explain drying UV coating
- describe the printing principle being utilised to apply aqueous coating
- explain why gluing tabs are not coated
- identify the temperature the drier is set at to dry aqueous coating
- explain when to use different image carriers (plate or blanket)
- outline the effect skeleton wheels can have on the coating surface
- describe how to measure the amount of gloss on the surface
- outline organisational responsibility for the final approval on the job
- describe the effect in the following scenarios:
 - UV coating on a wet print
 - viscosity is too high or too low
 - ink coverage is excessive, i.e. over 250%

- identify key types of information in, and the location of, machine manuals, safety and other documentation relevant to this task.

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 dedicated coating machine.

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>