



Australian Government

ICPPRN495 Set up and use complex colour management for production

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 create profiles and finger-print presses to obtain the best match across colour devices.

It applies to individuals who undertake complex colour management techniques to customise a workflow in their particular workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

ICPPRN387	Use colour management for production
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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. Finger-print press	1.1 Suitable test charts are selected or produced 1.2 Press is optimised to workplace standard, in collaboration with press operator 1.3 Test chart is printed with standard ink densities on any one of a range of stocks

ELEMENT	PERFORMANCE CRITERIA
2. Measure press test charts	2.1 Colour measurement devices are calibrated and used to measure printed test charts 2.2 Multiple charts are measured and results recorded 2.3 Software is used to average multiple measurements
3. Create and use custom press profiles	3.1 Appropriate reference file is selected to match printed chart 3.2 Profiling software is used to create an output press profile from the averaged measurement file and profile is tested and edited if required 3.3 Profile is inserted into colour workflow
4. Create and use digital device profiles	4.1 Suitable test charts are selected 4.2 Device is calibrated and test chart is output or digitised 4.3 Test chart is measured using a colour measurement device 4.4 Appropriate reference file is selected to match test chart 4.5 Software is used to create a profile 4.6 Device profile is inserted into the colour workflow
5. Maintain custom colour management workflow	5.1 Printing conditions are monitored and recorded to ensure adherence to workplace standard 5.2 Digital devices are regularly calibrated

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
Writing	2.2, 5.1	Completes records accurately and according to workplace requirements
Numeracy	2.1-2.3, 4.3	Uses colour measurement devices to perform calculations in relation to colour profiles
Navigate the world of work	1.2, 1.5	Complies with organisational policies and procedures relevant to own role
Get the work	1.1-1.3, 2.1-2.3,	Takes responsibility for planning and organising own

done	3.1-3.3, 4.1-4.6, 5.1, 5.2	workload, identifying ways of sequencing and combining elements for greater efficiency and assembles required resources • Responds to predictable problems and implements standard or logical solutions related to role in immediate work environment • Utilises a broad range of digital features optimising software functions for specific purposes
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICPPRN495 Set up and use complex colour management for production	ICPPR495A Set up and use complex colour management for production	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 ICPPRN495 Set up and use complex colour management for production

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Performance Evidence

Evidence of the ability to:

- create custom device profiles in a digital production workflow to enhance the match across proofs, monitors and final products
- identify and use information relevant to the task from a variety of information sources
- complete THREE custom device profiles that have been used within a colour workflow
- produce a final product from the colour workflow.

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:

- list work health and safety (WHS) issues to be considered when managing colour for digital production
- discuss importance of bringing a device into a known state
- explain how often to calibrate devices
- outline what condition changes result in the need for re-calibration
- describe colour measurement devices and usage
- list various types of proprietary software used for colour measurement
- discuss comparison of test charts, their advantages and disadvantages
- describe the process of determining grey balance and white points
- identify colour profiles and their use
- describe the effect colour profiles have on output
- explain the difference between input, output and display profiles
- outline various colour management systems
- describe components of a colour management system
- outline components of a colour-managed workflow

- discuss red, green blue (RGB) versus cyan, magenta, yellow, black (CMYK), spot colour versus mixed colour workflows
- describe how to implement colour management on a system
- identify workplace and international publication and printing standards
- explain effects different substrates have on colour reproduction for proofing and final production
- describe how dot gain effects colour
- discuss under colour removal (UCR) and grey component replacement (GCR).

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:

- printing presses
- raster image processors (RIPs) with colour management features
- profiling software
- colour output devices
- densitometers and spectrometers.

Assessors must satisfy NVR/AQTF assessor requirements.

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