



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **ICPPR491C Use on-press monitoring of print quality**

**Revision Number: 1**

## ICPPR491C Use on-press monitoring of print quality

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit describes the performance outcomes, skills and knowledge required to use computerised print quality monitoring devices.
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### Application of the Unit

<b>Application of the unit</b>	This unit requires the individual to select computerised settings to set up and run a press to acceptable tolerances and to monitor quality both electronically and visually during the run, and to make adjustments to maintain print quality. Additional adjustments to the specifications may be made during the run and adjustments made to suit.
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Set up print control devices	1.1.CIP3/CIP4 data, or equivalent, is used to create a profile 1.2.Job is made ready to achieve position, register and fit to the <b><i>specified standards</i></b> 1.3.Colour is made ready to match appropriate colour standards 1.4.Data is interpreted and appropriate adjustments made to gain approval to run <b><i>press</i></b>
2. Maintain print quality throughout the run	2.1.Print is inspected visually to meet specified standards during run 2.2.Data is analysed against the required standards 2.3.Appropriate adjustments are made to maintain consistency throughout run 2.4.At regular intervals <b><i>monitor</i></b> and maintain job to ensure <b><i>quality</i></b>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- communication of ideas and information by communicating specifications for colour profiles and pre-press requirements for printing to clients
- collecting, analysing and organising information by collating and integrating information on colour profiles and press performance
- planning and organising activities by establishing sequence of monitoring to ensure quality output
- teamwork when integrating job planning with pre-press
- mathematical ideas and techniques by understanding and applying colour profiles and curves to machine adjustment
- problem-solving skills by monitoring samples and adjusting equipment as necessary
- use of technology by efficiently using monitoring systems to ensure quality output

#### Required knowledge

- colour theory of additive colours (light), RGB
- colour theory of subtractive colours (pigments), CMYK
- relationship between ranges of visual colour RGB and CMYK
- ICC profiling
- underlying principle of densitometry
- underlying principle of spectrophotometry
- basic underlying principles for determining tolerance in densitometry and spectrophotometry
- an original colour control bar determinates
- determining the accuracy of the elements in a colour bar
- ensuring consistent print quality output
- recognising colour contamination
- setting alarm limits for colour contamination
- accessing data
- determine that data is appropriate
- sample to ensure consistency
- processes that you would put in place if sample varies from standard
- ways quality can vary and how they can be fixed
- computerised functions, common faults and electronic registration systems
- information that you need from pre-press to ensure quality product

**REQUIRED SKILLS AND KNOWLEDGE**

- information that you need to give to pre-press to ensure quality product
- meaning of the terms registration, fit, position and alignment
- importance of registration marks

## Evidence Guide

### EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the ability to:

- may be defined by enterprise/operator or default tolerances, client requirements, colour tolerances, industry standards
- demonstrate an ability to find and use information relevant to the task from a variety of information sources
- set up and align monitoring device to appropriate standards on THREE occasions
- produce profiles of samples taken during THREE different print runs that show print production is within agreed tolerances, if possible using different variables
- evidence for assessment may be gathered from assessment of the unit of competency alone or through an integrated assessment activity.

#### Context of and specific resources for assessment

Assessment must ensure:

- assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment
- a computerised printing machine.

#### Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

#### Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:

- this unit is an additional skill to most printing units and may be assessed at the same time.

## Range Statement

RANGE STATEMENT	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<b><i>Specified standards</i></b> may include:	<ul style="list-style-type: none"> <li>may be defined by enterprise/operator or default tolerances, client requirements, colour tolerances, industry standards.</li> </ul>
<b><i>Presses</i></b> may include:	<ul style="list-style-type: none"> <li>press must be aligned to recognised colour standard.</li> </ul>
<b><i>Monitoring systems</i></b> may include:	<ul style="list-style-type: none"> <li>built-in or add-on or stand alone systems including: image control. Electronic colour management eg densitometry, colour imagery, Komori system, spectrophotometry.</li> </ul>
<b><i>Quality standards</i></b> may include:	<ul style="list-style-type: none"> <li>CIP3 and CIP4</li> </ul>
<b><i>Electronic data transfer</i></b> may include:	<ul style="list-style-type: none"> <li>press management systems such as Prepress Interface, PECOM.</li> </ul>
<b><i>Plates</i></b> may include:	<ul style="list-style-type: none"> <li>colour bars must be original.</li> </ul>

## Unit Sector(s)

Unit sector	
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## Competency field

Competency field	Printing
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## Co-requisite units

Co-requisite units		