



Australian Government

Department of Education, Employment and Workplace Relations

ICPPR384A Set up and produce basic digital print

Revision Number: 1

ICPPR384A Set up and produce basic digital print

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to set up for and produce basic digitally printed product. This unit incorporates the use of raster image processor (RIP) technology when outputting to digital devices including wide format. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	This unit applies to the production of basic digitally printed products in the instant print and copy shop business environment.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	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. Check components and functions of a digital print system	1.1. All areas of user replaceable consumables are checked and replacements made 1.2. Substrate feeding mechanisms and transport units are checked and cleared of any misfeeds 1.3. Correct set-up for data and electrical power is completed 1.4. Shutdown and restart procedures are performed according to manufacturer's specifications 1.5. Print driver and/or job download software are correctly installed and set-up on workstation computer and/or digital front-end processor
2. Maintain digital printing system to maximise productivity and quality	2.1. Routine maintenance tasks are performed according to manufacturer's specifications 2.2. Substrate transport and inking systems are cleaned to ensure optimum productivity and quality 2.3. Temperature and humidity conditions are checked to ensure even flow of substrate 2.4. Substrate registration mechanisms are checked to ensure alignment of printed images 2.5. Ink density calibration is performed on a digital print system to meet job specifications 2.6. Basic maintenance solutions to minimise ink residue, substrate misfeed, paper particle dust, uncalibrated systems and ink coverage are implemented
3. Maintain and perform optimum substrate handling procedures	3.1. A paper handling and storage system for a digital print environment are developed that maintains substrate integrity and digital image quality 3.2. Machine status is checked, print counters and consumable levels are reviewed and time estimated for reordering, servicing and reporting purpose
4. Confirm job specifications	4.1. Print job specifications are read and interpreted from job documentation or production control system 4.2. Availability of all job components is checked according to enterprise procedures 4.3. Finishing requirements of job are checked and internal workflow and/or outsource arrangements are coordinated according to enterprise procedures 4.4. Run time of job is calculated and completion time is estimated, allowing consideration for other

ELEMENT	PERFORMANCE CRITERIA
	production demands
5. Set up reel system	5.1. Unwind reel is adjusted according to job specifications 5.2. Rewind reel is set up and adjusted according to job specifications 5.3. Minor in-line processes are set up and adjusted according to job specifications
6. Set up sheet transportation system on sheet-fed machine	6.1. Substrate is loaded into correct feeding mechanism and all substrate properties are correctly specified in the user control interface 6.2. Adjustments to the delivery unit are identified and made using the user control interface according to job specifications 6.3. On-line finishing unit is adjusted using the user control interface according to job specifications
7. Use RIP or front-end processor to set up job	7.1. Electronic data files are located and retrieved according to job specifications 7.2. RIP or front-end processor parameters are set according to job specifications 7.3. Preview or preflight check of electronic data files is performed to verify correct job set-up according to job specifications 7.4. Basic troubleshooting methods are applied to identify and rectify unverified data files, file errors and job requirement inconsistencies according to manufacturer's specifications
8. Submit data files to a digital print machine	8.1. Job priority is determined according to job specifications and production schedules 8.2. Data file is submitted to print and image quality and machine productivity checks are performed
9. Produce digital proof and run digital print job	9.1. A proof run is conducted to confirm proof conforms to job specifications and/or for client approval if required 9.2. Entire print run is conducted according to job specifications ensuring that machine productivity and quality are monitored and rectified throughout the duration of the print job
10. Coordinate and/or perform document finishing and client delivery	10.1. Steps required for document finishing are identified if not performed on in-line finishing units on a reel or sheet-fed system according to job specifications

ELEMENT	PERFORMANCE CRITERIA
	10.2. Finished print work is packaged in a manner to prevent damage and to conform to delivery requirements according to job specifications

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- occupational health and safety (OHS) skills for operating machinery, such as safely switching off machinery before cleaning is started
- communication skills for interpreting job tickets and requirements
- collecting, analysing and organising skills for collecting and assessing data about coating process and machine specifications and characteristics and how these interact
- planning and organising skills for identifying and providing information about time and materials requirements for set-up, production and finishing to ensure efficient operation
- teamwork skills for maintaining the production process in association with other workers
- numeracy skills for calculating substrate properties and production speeds to determine run length
- problem-solving skills for recognising proofing faults and determining adjustments to correct them
- technical skills for using computerised technology to access and adjust data files

Required knowledge

- workplace job ticket procedures
- pre-printing set-up checks and procedures
- file transfer actions, problems and solutions
- OHS issues relating to ink/toner
- determining the selection of specific ink/toner for varied printed products
- how to ensure the quality of ink/toner
- what to do if the required substrate was unavailable
- maximum weight of a substrate that can be printed on a specific machine
- minimum weight of a substrate that can be printed on a specific machine
- possible faults of printing on lightweight paper
- availability of pre-prepared substrates for specific machine
- maximum delivery quantity for specific machine
- possible problems regarding incorrect feeding and delivery
- data formats that can be used in digital print
- the benefits of using electronic data rather than scanning hard copy
- ways to submit a PDF file to the digital printer
- OHS procedures relating to setting up in-line processes
- in-line options that are available on specific machine
- on-line finishing options that are available on specific machine

REQUIRED SKILLS AND KNOWLEDGE

- setting up in-line/on-line processes
- circumstances when a job would be modified before printing
- the steps involved for a client approval of the print
- proof check procedures
- processes involved for gaining final approval of a basic job
- various types of binding
- procedures followed if the binding method required by the client was not available at the workplace
- alternative options if the document size was too thick to staple
- importance of packing finished print work
- location of machine manuals, safety and other documentation relevant to the set up and production of digitally printed products

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:

- set up a reel, sheet-fed or wide format digital printer
- access data and conduct a digital proof run
- adjust settings and ensure production speeds are attained
- use a RIP or front-end processor
- find and use information relevant to the task from a variety of information sources
- demonstrate all safety devices on machine
- perform preventive maintenance according to manufacturer's specifications
- set up and print four basic digital printing jobs according to manufacturer's specifications and enterprise procedures.

Context of and specific resources for assessment

Assessment must ensure:

- that conditions are typical ambient conditions found in the workplace
- access to relevant facilities, equipment and materials used for digital printing, such as production digital presses or wide format printers
- use of culturally appropriate processes and techniques appropriate to the language and literacy capacity of learners and the work being performed.

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
- third party workplace reports of on-the-job performance by the candidate
- practical demonstration by the candidate when setting up and producing a basic digitally printed product.

Guidance information for

Holistic assessment with other digital production units

EVIDENCE GUIDE**assessment**

relevant to the workplace and job role is recommended.

For valid and reliable assessment of this unit, evidence should be gathered over a period of time through a range of methods for assessment to indicate consistent performance.

Range Statement

RANGE STATEMENT

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.

<i>Consumables</i> may include:	• ink • toner • developer • waste toner • cleaning web • fuser • various substrates.
<i>Substrates</i> may include:	• range of print media and paper, such as: • coated • uncoated • card • canvas • vinyl and plastic.
<i>Manufacturer's specifications</i> may include:	• technical, administrator and user specifications documented by a manufacturer for a range of printing machines.
<i>Inking systems</i> may include:	• commonly used inking systems in colour printing, such as: • toner • inkjet • liquid toner-based.
<i>Calibration</i> may include:	• mechanical and/or electronic and/or visual controls used to identify and correct ink coverage and density inconsistencies in a range of printing equipment.
<i>Machines</i> may include:	• non-impact printing machines, including: • inkjet • laser • wide format with computerised monitoring and/or control.
<i>Enterprise procedures</i> may include:	• rules • standards

RANGE STATEMENT	
	• OHS guidelines • communication protocols and behaviour codes of a range of workplace environments.
<i>In-line processes</i> may include:	• stapling • punching • perforating • cutting • numbering or date coding.
<i>RIP or front-end processor</i> may include:	• computerised monitoring and data entry device used to enter: • machine settings • job specification settings • monitor machine status • perform machine productivity enhancements.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Printing
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