

## Make ready a pad printing machine for single colour pad printing

**Level** 3

**Credits** 15

**Purpose** People credited with this unit standard are able to: check documentation, and confirm requirements for the pad printing production job are available; prepare objects for pad printing; select and use inks and ink additives to meet the requirements of the job; install pads into pad printing machine; set up pad printing machine components onto machine bed; set up plate holder, plates, and pads; pre-set the inking system; load machine, position objects, unload safely, and set up drying racks; and take a print and prepare for production run.

**Subfield** Printing

**Domain** Pad Printing

**Status** Registered

**Status date** 18 July 2008

**Date version published** 12 December 2008

**Planned review date** 31 December 2013

**Entry information** Prerequisite: Unit 340, *Demonstrate knowledge of safe working practices in the printing and graphic pre-press industries*, or demonstrate equivalent knowledge and skills.

Recommended: Unit 24988, *Demonstrate introductory knowledge of pad printing*; Unit 24989, *Prepare, handle, and store substrates used for pad printing*; and Unit 24990, *Wash up a pad printing machine*; or demonstrate equivalent knowledge and skills.

**Accreditation** Evaluation of documentation and visit by NZQA and industry.

**Standard setting body (SSB)** Competenz

**Accreditation and Moderation Action Plan (AMAP) reference** 0005

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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## Special notes

- 1 All workplace practices must meet any applicable and recognised codes of practice, and documented workplace health, safety, and environmental procedures for personal, product, workplace health, safety, and environmental matters; and the obligations required under current law including the Health and Safety in Employment Act 1992, Resource Management Act 1991, and their subsequent amendments.
- 2 *Workplace practices* refer to the documented procedures for the machine and/or workplace.

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## Elements and performance criteria

### Element 1

Check documentation and confirm requirements for the pad printing production job are available.

#### Performance criteria

- 1.1 Job documentation is checked to ensure that all specifications for the process being undertaken are complete, and any discrepancies are reported in accordance with workplace practices.
- 1.2 Components required for the job are checked against the job documentation, and their availability is confirmed.
- 1.3 Availability of equipment, as determined by the job documentation, is confirmed.

### Element 2

Prepare objects for pad printing.

#### Performance criteria

- 2.1 Object suitability is confirmed for the job requirements and the production process.
- 2.2 Object quantity issued is confirmed against the job documentation.
- 2.3 Objects are conditioned for surface tension in accordance with workplace practices.

Range may include but is not limited to – corona discharge, flaming, chemical treatment.

### Element 3

Install pads into pad printing machine.

#### Performance criteria

3.1 Pads are selected to meet the requirements of the job.

Range may include but is not limited to – cone, rotary, roof top, bar, rectangular, circular.

3.2 Pads are secured into the machine in accordance with workplace practices and machine operating manual.

### Element 4

Set up pad printing machine components onto pad printing machine bed.

Range components may include but are not limited to, depending on machine being used – doctor blade, spatula, support bar.

#### Performance criteria

4.1 Machine components are selected and secured in place.

4.2 Height of machine bed is adjusted to suit size of object to be printed.

4.3 Machine bed is adjusted to suit position of image on object to be printed.

### Element 5

Select and use inks and ink additives to meet the requirements of the pad printing production job.

#### Performance criteria

5.1 Inks suitable for the job are identified, and ink quantities are calculated, in accordance with workplace practices.

5.2 Ink additives are selected and used to ensure quality of print meets the requirements of the job.

Range any of – adhesion modifiers, antistatic agents, catalysts (hardeners), flow agents, matt and gloss agents, retarders, thinners.

## Element 6

Set up plate holder, plates, and pads, for pad printing.

### Performance criteria

- 6.1 Plate holder is set up and adjusted to meet the requirements of the job.
- 6.2 Appropriate plate and plate holder are selected, and plate is secured into plate holder, in accordance with workplace practices.
- 6.3 Pads are positioned and adjusted to meet the requirements of the job.

## Element 7

Pre-set the inking system on the pad printing machine.

### Performance criteria

- 7.1 The inking system on the machine being made ready is explained in terms of operation.
- 7.2 Ink is added to the inking system in the correct amount to suit the image on the plate and the run length.
- 7.3 Inking system is set up and adjusted in accordance with workplace practices and to meet the requirements of the job.

## Element 8

Load pad printing machine, position objects, unload safely, and set up drying racks.

### Performance criteria

- 8.1 Objects are loaded into machine in accordance with workplace practices, and are positioned to meet the requirements of the job.
- 8.2 Faults found while loading substrate are identified, and are reported in accordance with workplace practices.  
  
Range faults may include but are not limited to – damage, dimensional distortion, foreign matter, marking.
- 8.3 Objects are unloaded safely, and any defects identified are reported and/or rectified in accordance with workplace practices.  
  
Range defects may include but are not limited to – marking, mis-registration, adhesion, splitting, crushing, inking system faults.
- 8.4 Drying racks are set up in accordance with workplace practices and to suit the objects being dried.

## Element 9

Take a print and prepare for pad printing production run.

### Performance criteria

- 9.1 Potential hazards for the equipment being used are identified and are reported in accordance with workplace practices.
- 9.2 Impression is checked for image transfer, and adjustments are made, to meet the requirements of the job.
- 9.3 Print is taken and confirmed against job documentation and available sample or proof for correct image transfer and position.
- 9.4 Machine is fine-tuned to ensure that the required quality and production standards are achieved.
- 9.5 Print is passed for production run, and approval to run is obtained, in accordance with workplace practices.
- 9.6 Counters are set ready for commencement of run.

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### Please note

Providers must be accredited by the Qualifications Authority, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

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### Comments on this unit standard

Please contact [Competenz info@competenz.org.nz](mailto:Competenz info@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.