

Undertake pre-make ready for sheet-fed offset printing

Level 3

Credits 20

Purpose People credited with this unit standard are able to: check job documentation and confirm that the requirements for the job are available; prepare substrates for sheet-fed printing; select and use chemicals required for sheet-fed offset dampening systems to meet press and job requirements; confirm plates meet press and job requirements; select, mix and match inks and select and use ink additives for sheet-fed offset printing in accordance with workplace practices; and demonstrate knowledge of platemaking in accordance with workplace practices.

Subfield Printing

Domain Printing - Sheet-Fed

Status Registered

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Entry information Prerequisite: Unit 340, *Demonstrate knowledge of safe working practices in the print industry*, or demonstrate equivalent knowledge and skills.

Recommended: Unit 26321, *Demonstrate industry knowledge for sheet-fed printing*; and Unit 16509, *Demonstrate knowledge of, and handle and store substrates used for sheet-fed printing*; 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>.

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, and its subsequent amendments.
- 2 Candidates undertaking this unit standard must provide evidence of normal colour vision. Further information on the Competenz's policy for colour vision can be obtained from Competenz, PO Box 9005, Newmarket, Auckland 1149 or www.competenz.org.nz.
- 3 **Definitions**
job documentation refers to the documentation that is used in the workplace that contains the instructions and requirements for a particular production job. This may include but is not limited to workplace orders, production orders, workplace specifications, samples, lay cards;
job requirements refer to specific requirements for the job at hand. These requirements may or may not be covered in the job documentation and may include special instructions, quality requirements expected by the customer, and/or production standards as set down by the workplace;
press requirements refer to the specific requirements for the press being operated as set out in the operating manual or in accordance with workplace practices;
workplace practices refer to the documented procedures for the machine and/or workplace.

Elements and performance criteria

Element 1

Check job documentation and confirm that the requirements for the 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 substrates for sheet-fed printing.

Performance criteria

- 2.1 Substrate suitability and quality are confirmed as meeting the job requirements.
- Range dependent on substrates used – meets job specifications, correct grain direction, watermark, affinity to ink, substrate trimmed accurately.
- 2.2 Substrate quantity, including overs, is calculated and quantity issued is confirmed against the job documentation.
- 2.3 Substrates are conditioned in accordance with workplace practices to ensure smooth running on the press.

Element 3

Select and use chemicals required for sheet-fed offset dampening systems to meet press and job requirements.

Range may include but is not limited to – water, fountain concentrate, alcohol or alcohol substitutes, driers.

Performance criteria

- 3.1 Fountain additives used in the workplace are identified and selected.
- 3.2 Fountain additive concentrations are measured and diluted.
- 3.3 Fountain solution is checked for pH and conductivity.
- 3.4 Problems arising from the use of chemicals are solved.
- Range image blinding, scumming, tinting, emulsification, roller stripping.

Element 4

Confirm plates meet press and job requirements.

Performance criteria

- 4.1 Plates are checked in accordance with workplace practices and confirmed as meeting the press requirements.
- Range calliper, size, register, correct punching for press.
- 4.2 Plates are checked against the proof for image defects, and any defects are rectified or reported in accordance with workplace practices.

Element 5

Select, mix and match inks and select and use ink additives for sheet-fed offset printing in accordance with workplace practices.

Performance criteria

- 5.1 Inks are selected to suit the substrate, press and job requirements.
- Range may include but is not limited to – drying properties, transparency, blister packaging, colourfastness, scuff, odour free, substrate, gloss, colour, opacity, overprint finish, laser printer compatibility.
- 5.2 Inks are mixed using colour mixing and matching systems available in the workplace.
- 5.3 Ink quantities are calculated to meet the job requirements.
- 5.4 Ink additives are selected and used to ensure quality of print meets job requirements.

Element 6

Demonstrate knowledge of platemaking in accordance with workplace practices.

Range may include but is not limited to – direct photographic plate, computer to plate (CTP).

Performance criteria

- 6.1 Platemaking procedure is explained.
- 6.2 Platemaking faults are recognised and reported.
- Range incorrect exposure, image defects, poor contact, incorrect image positioning, damaged plate.

Please note

Providers must be accredited by NZQA, 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 NZQA 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.

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.