

Undertake pre-make ready for screen printing

Level 4

Credits 20

Purpose People credited with this unit standard are able to: select inks or dyes for screen printing; mix and match inks or dyes, and select and use additives; demonstrate knowledge of the production of film positives for screen printing; and demonstrate knowledge of stripping and cutting film positives for screen printing.

Subfield Printing

Domain Printing - Screen

Status Registered

Status date 21 February 2005

Date version published 12 December 2008

Planned review date 31 December 2010

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: one of Unit 5139, *Make ready and print multi colour (not process) for flat sheet screen printing*; or Unit 5141, *Make ready and print multi colour (not process) for fabric (panel) screen printing*; or Unit 5143, *Make ready and print multi colour (not process) for formed shapes screen printing*; or demonstrate equivalent knowledge and skills.

Replacement information This unit standard replaced unit standard 344.

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, Hazardous Substances and New Organisms Act 1996, Resource Management Act 1991, Privacy Act 1993 and their subsequent amendments.
- 2 *Workplace practices* refer to the documented procedures for the machine and/or workplace.

Elements and performance criteria

Element 1

Select inks or dyes for screen printing.

Performance criteria

- 1.1 Inks or dyes are selected to meet the requirements of the substrate, press, and job specifications.

Range inks are selected with regard to any of the following – transparency, opacity, colour, gloss, drying properties, lightfast, substrate, solvent compatibility, odourfree, toxicity, bleed properties.
- 1.2 Ink quantities are calculated to meet the requirements of the job specifications.

Range historical, formula.
- 1.3 Ink or dye sequence is determined to meet the requirements of the job specifications.

Element 2

Mix and match inks or dyes, and select and use additives.

Performance criteria

- 2.1 Inks or dyes are mixed using colour mixing and matching systems available in the workplace.
- 2.2 Ink or dye additives are selected and used to ensure quality of print meets job requirements.

Range any of – retarder, reducer, matting agent, gelling agent, hardener catalyst, flow agent, plasticisers, adhesion promoter, extender, photoinitiator.

Element 3

Demonstrate knowledge of the production of film positives for screen printing.

Performance criteria

- 3.1 Electronically generated images are outlined in terms of production.
- Range may include but is not limited to – image on floppy disk, tape, compact disk, scanner, computer, email, internet, digital camera.
- 3.2 Production of film positives for screen printing by camera and/or imagesetter is described.
- 3.3 Use of spreads and chokes (trapping) for multi colour printing is described.
- 3.4 Requirements for screen rulings, angles, and dots for screen mesh and inks are described.
- Range dot formation (conventional, stochastic [Diamond screening, CristalRaster]), dot gain, moiré, tonal range.
- 3.5 The method of electronic screen colour separation (scanning) is described.

Element 4

Demonstrate knowledge of stripping and cutting film positives for screen printing.

Range hand cutting or computer cutting.

Performance criteria

- 4.1 Procedures for stripping film positives are described and masking films used are recognised and named.
- Range registration, squareness, taping, cleanliness.
- 4.2 Procedures for cutting film positives from masking film are described.
- Range faults – overcut, undercut, tears, burrs.

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 if you wish to suggest changes to the content of this unit standard.