

Demonstrate introductory knowledge of pad printing

Level 3

Credits 7

Purpose People credited with this unit standard are able to: demonstrate knowledge of terms applicable to pad printing; describe halftones for pad printing; and demonstrate knowledge of the principles of design and layout, the machinery and equipment used in pad printing, and the use of reference material to ensure procedures are followed and required standards are met.

Subfield Printing

Domain Pad Printing

Status Registered

Status date 18 July 2008

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Entry information Open.

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 The following are relevant to this unit standard – 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, Copyright Act 1994, and their subsequent amendments.

2 Definitions

workplace requirements refer to materials, equipment, and conditions needed to produce a job to customer specifications;

required standards refer to the production standards set down by the workplace, and the quality standards expected by the customer for the finished product;

customer requirements refer to the specifications as set out in the job documentation.

Elements and performance criteria

Element 1

Demonstrate knowledge of terms applicable to pad printing.

Performance criteria

1.1 Terms applicable to pad printing are defined.

Range may include but is not limited to – additives, all purpose printers, closed principle, colour sequence, curing, densitometer, doctor blade, dot gain, durometer, evaporation, extenders, halftone, hardness, infra-red drying unit, jet dryer, light fastness, oxidation, pad printing inks, open principle, pigments, pads (tampons, teats), plates (clichés), polymerisation, register, relative humidity, retarder, rotary pad printers, solvent, static electricity, substrate pre-treatment, surface finish, transfer printing, ultraviolet (UV) curing units, upright printers, viscosity.

1.2 Demonstration of knowledge includes appropriate use of terms applicable to the pad printing process being undertaken in the workplace.

Element 2

Describe halftones for pad printing.

Performance criteria

2.1 Use of halftone and line film is described in terms of reproducing an original copy for pad printing.

Element 3

Demonstrate knowledge of the principles of design and layout for pad printing.

Range space, shape, symmetry, asymmetry, balance.

Performance criteria

3.1 The term 'layout' is defined and is explained in terms of function and purpose.

3.2 Principles of design and layout are explained in terms of job requirements for pad printing.

Element 4

Demonstrate knowledge of the machinery and equipment used in pad printing.

Performance criteria

- 4.1 The pad printing process is outlined, and its features, advantages, and limitations are listed.
- 4.2 Pad printing machinery is described in terms of functions.
Range open principle, closed principle.
- 4.3 Plates used in pad printing are identified and their characteristics described.
Range plates include – solid steel, thin steel, polymer, rotary, multiple image;
characteristics may include – cost, durability, etch depth, exposure and development, flexibility, handling and storage, image resolution, thickness.
- 4.4 Pads used in pad printing are identified and their characteristics described.
Range pads may include but are not limited to – cone, rotary, roof top, bar, rectangular, circular;
characteristics – shape, size, hardness, surface finish, material, pad swell, pad life.
- 4.5 Other pad printing equipment available in the workplace is described in terms of functions.

Element 5

Demonstrate knowledge of the use of reference material to ensure pad printing procedures are followed and required standards are met.

Range may include but is not limited to – instruction manuals, maintenance manuals, spare parts manuals, videos, product specification information.

Performance criteria

- 5.1 Demonstration includes locating reference material applicable to the pad printing process.
- 5.2 Demonstration of knowledge includes use of reference material to ensure machine operation meets workplace requirements.
- 5.3 Demonstration of knowledge includes use of reference material to ensure the finished product meets customer requirements.

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.