

## Demonstrate understanding of trade calculations for the print industry

**Level** 2

**Credits** 5

**Purpose** People credited with this unit standard are able to use measurement systems and measuring devices required for the print industry, and demonstrate mathematical skills to meet job requirements within a print company.

**Subfield** Printing

**Domain** Printing Production

**Status** Registered

**Status date** 21 August 2009

**Date version published** 21 August 2009

**Planned review date** 31 December 2014

**Entry information** Open.

**Accreditation** Evaluation of documentation 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 note

#### Definitions

*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 and/or company;

*print industry* includes all sectors involved in print and packaging industries including – pre-production, production, post-production activities, suppliers and distributors. The sectors include – graphic pre-press, digital output sheet-fed, reel-fed, screen, binding and finishing, fibreboard packaging;

*workplace practices* refer to the documented procedures for the machine and/or workplace.

---

## Elements and performance criteria

### Element 1

Use measurement systems and measuring devices required for the print industry.

#### Performance criteria

- 1.1 Metric system of weights and measurements is applied for the processes used in the workplace.
- 1.2 Measurements of time are read, converted, and calculated to meet workplace practices.
- 1.3 Measuring devices used in the workplace are described in terms of their characteristics.
- 1.4 Measuring devices are used as required for the production process being undertaken.
- 1.5 Measuring instruments, as available in the workplace, are used to ensure job requirements are met.

Range may include but are not limited to – conductivity meter, densitometer, durometer, girth tape, liquid measuring cylinder, machine adjustment and measuring scales, callipers, micrometer, pH meter, rules, sheet length gauge, thermometer, relative humidity meter, weighing devices, viscosity cup.

### Element 2

Demonstrate mathematical skills to meet job requirements within a print company.

#### Performance criteria

- 2.1 Problems are solved using addition, subtraction, multiplication and division.
- 2.2 Ratios and proportions are used.
- 2.3 Roman numerals are read and written.
- 2.4 Scales are read and weights calculated.
- 2.5 Calculations are used to meet requirements of the processes and operations being undertaken.
- 2.6 Industry accepted standards, applicable to the production process being undertaken, are used when referring to substrate sizes.

Range may include but is not limited to – ISO paper sizes for paper and board.

### **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.