Title	**Interpret and apply production drawings to ensure product quality in a manufacturing environment**		
Level	**3**	**Credits**	**5**

Purpose	People credited with this unit standard are able, in a manufacturing environment, to apply drawing control procedures; identify and interpret production drawings; and apply production drawing interpretation to job requirements, and check product quality.

Classification	Manufacturing Skills > Manufacturing Processes

Available grade	Achieved

Guidance Information

1 Legislation relevant to this unit standard includes:
Health and Safety at Work Act 2015.

2 Definitions
Company quality control procedures refer to specific details on an engineering drawing covering: checked and approved signatures for the release and use of a drawing; version numbers; compatibility with a master drawing; date of issue stamps; as well as procedures for the copying; recording; filing; and modification of a drawing.
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.
Specifications refer to all aspects of a technical engineering drawing which detail the dimensions, tolerances, and design of the completed product.
Workplace procedures refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, and procedures to comply with legislative and local body requirements.

3 Assessment information

a All activities and evidence must be in accordance with workplace procedures.

b This unit standard is designed for people within manufacturing industries who are engaged in production processes and are required to use technical engineering drawings for checking product design, for setting production machinery, and for checking the quality of the finished product**.** Drawings are limited to single components and may include assemblies.

4 Recommended skills and knowledge
Unit 19504, *Interpret and apply assembly drawings to ensure product quality*, or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Apply drawing control procedures in a manufacturing environment.

Performance criteria

1.1 Company quality control procedures for ensuring the accuracy and validity of drawings are followed.

Range including the right to access, modify, record, file, copy, and issue drawings.

1.2 Changes to drawings are identified, and if required, reported.

1.3 Drawing is checked for authorisation, identification, drawing and product numbers.

1.4 Drawing is looked after during use to maintain legible and useable drawing condition.

Outcome 2

Identify and interpret production drawings in a manufacturing environment.

Performance criteria

2.1 Components and assemblies are identified and interpreted as per job requirements.

2.2 Material requirements are determined and interpreted as per job requirements.

2.3 Dimensions and notes are interpreted as per job requirements.

2.4 Symbols are identified and interpreted.

2.5 Conventions are identified and interpreted.

Outcome 3

Apply production drawing interpretation to job requirements, and check product quality in a manufacturing environment.

Performance criteria

3.1 Product features are interpreted and measured.

Range includes but is not limited to identifying critical dimensions, tolerances, additional notes, specific product requirements.

3.2 Machine is set to ensure product meets drawing specifications.

3.3 Products are checked for compliance to specifications in accordance with company quality control procedures.

3.4 Variances are reported to supervisor.

3.5 Documentation is completed according to company quality control procedures.

Planned review date	31 December 2025

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 December 2002	31 December 2012
Revision	2	12 January 2006	31 December 2012
Rollover and Revision	3	24 August 2007	31 December 2014
Review	4	18 March 2011	31 December 2023
Review	5	26 August 2021	N/A

Consent and Moderation Requirements (CMR) reference	0013

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

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.