



**Australian Government**

# **MEM15001 Perform basic statistical quality control**

**Release: 1**

# MEM15001 Perform basic statistical quality control

## Modification History

Release 1. Supersedes and is equivalent to MEM15001B Perform basic statistical quality control

## Application

This unit of competency defines the skills and knowledge required to take samples and apply a statistical process to monitor production and applies to the collation and interpretation of statistical data in the context of statistical quality control.

When the production and interpretation of charts and graphs not dependent on knowledge and understanding of the implications for quality are required unit MEM12024 Perform computations should be selected.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

**Band: A**

**Unit Weight: 2**

## Pre-requisite Unit

MEM12024	Perform computations
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

## Competency Field

Quality

## Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	<b>Determine job requirements</b>	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.3 Use appropriate personal protective equipment (PPE) in accordance with SOPs
	1.4 Identify job requirements from specifications, plans, job sheets or work instructions
2 <b>Take samples</b>	2.1 Interpret the difference between populations and apply various sampling schemes in accordance with SOPs
3 <b>Apply statistical process to monitor production</b>	3.1 Interpret the concept of variation in terms of average and spread and use data to produce relevant statistical information
	3.2 Interpret data and present information to appropriate authority according to SOPs

## Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

**Sampling schemes include one (1) or more of the following:**

- agreed customer plans
- acceptable quality level (AQL) plans
- average outgoing quality Level (AOQL) plans
- Shainin
- Six Sigma

**Relevant statistical information includes**

- average
- range and process control data

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- one (1) or more of the following:**
- plotting of charts, including one or more of the following:
    - line graphs
    - run charts
    - tally charts
    - histograms
    - control charts
  - random and assignable causes

## Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM15001B Perform basic statistical quality control

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>