



Australian Government

MSMTMVER403 Verify Inspectors' Class reference standards

Release: 2

MSMTMVER403 Verify Inspectors' Class reference standards

Modification History

Release 2. Minor adjustments/corrections to all sections, inc. performance and knowledge evidence. Equivalent.

Release 1. Supersedes and is equivalent to MSATMVER403A Verify inspector's class reference standards

Application

This unit of competency covers the ability to calibrate reference standards to the Inspectors' Class level using standard calibration procedures. These procedures specify all associated reference standards, equipment and methods to be used and the required parameters, quantities and ranges to be tested, including the criteria for validation or rejection. Standard calibration procedures are sometimes complex and lengthy and must be performed in a methodical and standard manner. Personnel are not permitted to deviate from explicit instructions in any manner, nor modify the procedure, nor substitute alternative equipment.

This unit of competency is applicable to laboratory and calibration technicians who carry out testing and/or calibrations using standard calibration methods in National Association of Testing Authorities (NATA) accredited laboratories. They work under limited supervision and their results are interpreted and checked by the laboratory supervisor, quality officer or designated signatory

While no specific licensing or certification requirements apply to this unit at the time of publication, all inspection activity is legislated under the *National Measurement Act 1960*.

Pre-requisite Unit

Nil

Competency Field

Trade measurement

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

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|---|-------------|-----|---|
| 1 | Receive and | 1.1 | Identify the level of verification required by the client |
|---|-------------|-----|---|

	schedule Inspectors' Class reference standards for calibration	1.2	Evaluate and implement appropriate strategies where the standard's suitability for purpose does not meet client expectations
		1.3	Enter details for the Inspectors' Class reference standard into the organisation's information management system and apply appropriate tracking mechanisms
		1.4	Process 'urgent' calibration requests in accordance with organisational policy and procedures
		1.5	Maintain confidentiality of all client and organisation data and information
		1.6	Ensure that information provided to clients is accurate, relevant and authorised for release
		1.7	Deal with customers politely, efficiently and in accordance with organisational policy and procedures
		2	Prepare for calibration
2.2	Identify possible sources of measurement error during calibration and implement appropriate control strategies		
2.3	Condition Inspectors' Class reference standards and high order reference standards in accordance with calibration and organisational procedures, where applicable		
2.4	Identify hazards and use the specified personal protective equipment, safety equipment and procedures		
2.5	Evaluate the suitability of high order reference standards and measuring equipment selected for the calibration against the organisation's specification requirements and calibration procedure		
2.6	Document calibration status, report out-of-calibration test equipment/high order reference standards and quarantine where required		
3	Perform calibration	3.1	Assess the design and appearance of an Inspectors' Class reference standard against prescribed standards

- 3.2 Perform calibration without variance according to the documented procedure to ensure repeatability of measurement
 - 3.3 Confirm readings are the result of a valid measurement and record data as required
 - 3.4 Adjust Inspectors' Class reference standard, if applicable
- 4 Analyse and report calibration results
 - 4.1 Estimate and document uncertainty of measurement in accordance with organisational policy and procedures, if required
 - 4.2 Identify prescribed performance criteria for the Inspectors' Class reference standard and evaluate against calibration results
 - 4.3 Analyse calibration results to confirm they are within the maximum permissible variation and uncertainty for the scope of calibration
 - 4.4 Analyse any variances from the performance criteria to identify isolated or systemic problems with the Inspectors' Class reference standards or calibration procedure
 - 4.5 Record the results of each test/calibration accurately, unambiguously and objectively
- 5 Finalise calibration
 - 5.1 Attach calibration labels, equipment stickers, quality control tags and tamper resistant seals as required by organisational procedures
 - 5.2 Prepare and submit to the laboratory supervisor a final report on the calibration detailing procedure, traceability, results and all other required information
 - 5.3 Store test equipment/high order reference standards and calibration records in accordance with organisational policy and procedures
 - 5.4 Identify and report unserviceable equipment or high order reference standards to the laboratory supervisor
 - 5.5 Clean equipment and high order reference standards in

accordance with organisational policy and procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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.

Inspectors' Class reference standards include one or more of:

- Inspectors' Classes of reference standards defined in the *National Measurement Regulations 1999*:
 - mass – Inspectors' Class 1, 2 and 3
 - length – Inspector's Class 1
 - volume – Inspector's Class 1

Standard calibrations include one or more of:

- testing and/or calibrating reference standards using standard methods and procedures

Legislation and standards include:

- national measurement legislation
- relevant national/international standards including ISO/IEC 17025
- applicable Commonwealth, state and territory work/occupational health and safety (WHS/OHS) legislation

Policy and procedures include:

- NMI policies and procedures
- NMI monographs
- Verifying authority internal policies and procedures

WHS/OHS and environmental management requirements include:

- complying with WHS/OHS and environmental management requirements at all times, which may be imposed through state/territory or federal legislation. These requirements must not be compromised at any time
- applying standard precautions relating to the potentially

hazardous nature of any materials used

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>