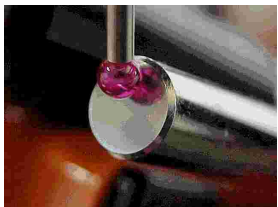


CMM CALIBRATION



Did You Know!

A laser calibration of your scales or a simple, single ball bar test is not sufficient to determine CMM performance.

A CMM Performance Test is a thorough test of the CMM and its probing system, providing the user with the confidence that their CMM is performing within the manufacturer's specification or their own documented accuracy requirements.

The performance test is carried out in accordance with EN ISO 10360^[1] using length bars or gauge blocks, a combined ring /plug gauge, ball bar, 3D reference artifact and reference sphere.

Measurements are performed on certified standards utilising the full volume of the CMM. Several orientations are chosen for each standard and subsequent measurements.

After the performance test has been completed a traceable certificate of results is issued. All measured values are summarised and tabulated for easy reference. The "as found" value for volumetric accuracy is given along with a value for the probing system accuracy.

It is good practice for the user of a CMM to adopt the use of a certified reference artefact of some type, that is designed^[2] to require similar measurement routines to those typically performed.

Periodically, this artefact should be measured by the CMM user(s) and the measurement data from the CMM compared to that of the certified reference artefact. This gives the user a level of confidence in the accuracy of the CMM "in between" scheduled performance tests.

The reference artefact can also serve as an internal proficiency test piece!

Typical Reference Artefacts are: – a purpose-made testpiece, - a ball bar, - a circular reference object, - a ball plate or a hole plate.

If you would like further information or prices for CMM calibration services or design and supply of reference artefacts, please contact the Laboratory Manager at the address below. Thankyou

**metrology calibration services**

P.O. Box 10-024 Telephone 64 7 849 6296

Hamilton Facsimile 64 7 849 2928

New Zealand

[1] Other Specifications may be used.

[2] Purpose made testpieces - 2D or 3D