

Technical Advisory NoteInternal Verification of TM0250

TM0250 is the reference used for a Mitutoyo 0 - 150mm digital caliper (s/n 12386127).

The accuracy of the *Mitutoyo* digital caliper is regularly checked by internally calibrating the caliper against gauge blocks. The method involves zeroing the caliper when the jaws are closed with a touch on force to establish a datum. A gauge block is then placed between the jaws, a touch on force is once again used to establish the length of the gauge block.

The accuracy of the internal calibration of the *Mitutoyo* digital caliper and any sources of uncertainty of the internal calibration have been included in the overall uncertainty budget for Mecmesin's calibration laboratory equipment.

The gauge blocks are regularly calibrated by a UKAS accredited laboratory. Therefore, the traceability chain to National standards is maintained through the use of the gauge blocks as described above. If the digital caliper is damaged in use, the caliper will be inspected and verified before being used again.

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