Approval No: P13/1/16
Reference: R2009/140
Issued: 20 May 2010

Australian Government

National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Cancellation
Interim Provisional Certificate of Approval No P13/1/16

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in Interim Provisional Certificate of Approval No P13/1/16 issued 19 November 2009 in respect of the

Hardware Products Model CC1050 Dimensional Measuring Instrument

submitted by Hardware Products Pty Ltd
61 Carnarvon Street
SILVERWATER NSW 2128

has been cancelled in respect of new instruments as from 20 May 2010.

(Note that 'Cancelled' means that the certificate is not valid for new instruments.)

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

Approval No: P13/1/16
Reference: R2009/140
Issued: 19 November 2009

Australian Government
National Measurement Institute

Bradfield Road, West Lindfield NSW 2070

Interim
Provisional Certificate of Approval
No P13/1/16

VALID FOR VERIFICATION/CERTIFICATION PURPOSES UNTIL 19 MAY 2010

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the

Hardware Products Model CC1050 Dimensional Measuring Instrument

submitted by Hardware Products Pty Ltd
61 Carnarvon Street
SILVERWATER NSW 2128.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 129, *Multi-dimensional Measuring Instruments*, dated July 2004.

CONDITIONS OF APPROVAL

It is the responsibility of the submittor to make special arrangements with the respective state or territorial trade measurement department (if required by that department) to have instruments covered by this Interim Certificate verified/certified pending issue of the final Certificate and Technical Schedule.

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI P13/1/16’ and only by persons authorised by the submittor.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

Special:

The dimensions determined may also be used for the calculation (by peripheral equipment) of a volume of the object, also for the purposes of determining freight or postal charges.

Special Conditions of Approval: (Provisional Approval)

This approval is limited to five (5) instruments, the locations and/or serial numbers of which may be obtained from the National Measurement Institute prior to them being verified/certified. More than one instrument may be located at each site.

The approval will remain provisional pending completion of satisfactory laboratory testing and evaluation.

In the event that the laboratory testing and evaluation is unsuccessful, or of unsatisfactory performance, the approval may be cancelled (or altered).

The instrument purporting to comply with this approval shall be marked with approval number 'NMI P13/1/16' and only by persons authorised by the submittor. The 'P' in the approval number may be a temporary marking.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 19 November 2009

- A Hardware Products model CC1050 dimensional measuring instrument which is approved for use for the determination of the linear dimensions of stationary objects.

  Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

  The pattern has a telescopic free-floating arm with a contact ball on its lower end that is placed against each side face and the top face of the object being measured, in any sequential order. The arm is supported in gimbals. The gimbal assembly is supported by a beam located well above the counter surface on which the object being measured is placed.

  The pattern is approved for use for the determination of the linear dimensions of objects having maximum dimensions (i.e. length x width x height) of 105 × 65 × 60 cm and minimum dimensions 5 × 5 × 5 cm, with a scale interval of measurement (*d*) of 0.5 cm.

  The pattern converts the detected characteristics into the linear dimensions of the smallest rectangular box (parallelepiped – 16) that would fully contain the object.

  (16) A rectangular box (parallelepiped) is a polyhedron having six faces that are parallel in pairs; each face is a parallelogram and adjacent edges are perpendicular.

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the *National Measurement Regulations 1999*.

Date of Approval: 19 November 2009