

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Multiple Dimensions Measuring Device Static Dimensioning Only Models: TLD250 Maximum: (see below) Minimum: (see below) d_{min}: (see below) Submitted By: Mettler-Toledo, LLC 1150 Dearborn Drive Worthington, OH 43085 Tel: 614-438-4387 Fax: 614-438-4355 Contact: Scott Davidson Email: <u>scott.davidson@mt.com</u> Web site: <u>www.mt.com</u>

Standard Features and Options

Static dimensioning of opaque cuboidal and known shaped objects and non-cuboidal irregular objects.

Standard Features:

- 3D camera
- Laser: Class 1
- Communication: Ethernet, Serial, USB

Dimensioning Designation for Cuboidal Objects:

Axis ID	d _{min}	Minimum	Maximum
Length	0.2 inches / 0.5 cm	2.4 inches / 6 cm	39 inches / 100 cm
Width	0.2 inches / 0.5 cm	2.4 inches / 6 cm	31 inches / 80 cm
Height	0.2 inches / 0.5 cm	2.4 inches / 6 cm	39 inches / 100 cm

Dimensioning Designation for Irregular and Known Shaped Objects:

Axis ID	d _{min}	Minimum	Maximum
Length	0.5 inches / 1 cm	6 inches / 12 cm	39 inches / 100 cm
Width	0.5 inches / 1 cm	6 inches / 12 cm	31 inches / 80 cm
Height	0.5 inches / 1 cm	6 inches / 12 cm	39 inches / 100 cm

Options:

- NTEP Certified and compatible Scale
- Handheld Bar Code Scanner
- Remote Display

Software Version ID:

• 2.00.124.077 or Higher

Temperature Range: 0 °C to 35 °C (32 °F to 95 °F)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Choqueque

Mahesh Albuquerque Chair, NCWM, Inc.

Ivan Hankins Chair, NTEP Committee Issued: September 15, 2022

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

The National Conference on Weights and Measures (NCWM) does not approve, recommend or endorse any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.



Mettler-Toledo, LLC

Multiple Dimension Measuring Device / TLD250

<u>Application</u>: The TLD250 is a static dimension measurement instruments that utilizes a 3d camera and an NTEP certified and compatible non-computing scale to dimension cuboidal shaped, irregular and known shape opaque objects. Can be used with or without the NTEP certified and compatible scale.

Identification: The required information appears on an adhesive badge attached to the side of the dimensioning instrument column.

<u>Sealing</u>: The device is sealed using a Category 1 sealing method. A wire seal or PSA seal preventing access to calibration/configuration switch.

Operation: The ready condition is shown with zeros on the display for the dimensions. The system automatically detects when an object is in the field of view to start the measurement. The object needs to cover 30 percent of the "Autosense Zone" which is the rectangle superimposed on the dimensioner base. Please see the last image showing the "Autosense Zone"

<u>Test Conditions</u>: A Mettler-Toledo model TLD250 was submitted for evaluation. The emphasis of the evaluation was on device design, operation, performance, compliance with influence factors and interaction with Mettler Toledo model BC scale NTEP Certificate of Conformance 13-111. Multiple dimension measurements were performed near maximum, near minimum, and near midrange for the ranges listed. Several measurements were performed using known shapes and irregular shapes. Measurements were performed with metric and imperial standards. The instrument was tested over a temperature range of 0 °C to 35 °C (32 °F to 95 °F). Test were conducted with power supply voltages of 85 VAC, 120VAC and 264 VAC.

Evaluated By: J.Gibson, B. Stone (OH)

Type Evaluation Criteria Used: *NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2022 Edition. NCWM, Publication 14: Weighing Devices, 2022 Edition.*

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: D. Flocken (NCWM)

Examples of Device:



Mettler-Toledo, LLC

Multiple Dimension Measuring Device / TLD250





Wire Seal



Mettler-Toledo, LLC

Multiple Dimension Measuring Device / TLD250

Dimensioner display showing "Autosense Zone" superimposed on the dimmensioner base.

METTLER T	OLEDO	TLD250
Ξ		20:24 2022/09/08
L:	0.0	T - Harry
W:	0.0	~
H:	0.0 cm	
Ö		
EO		

