NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Non-Computing Scale
Digital Electronic, Jeweler's, Grain, Precision and Analytical
Model: MS Series, PH Series and JP Series
n_{max}: 220 000
e_{min}: 10 mg
Accuracy Class: I, II, III

Submitted By:
Mettler-Toledo, LLC
1150 Dearborn Drive
Worthington, OH 43085
Tel: 614-438-4387
Fax: 614-438-4355
Contact: Scott Davidson
Email: scott.davidson@mt.com
Web site: www.mt.com

Standard Features and Options

- Semi-automatic (push-button) Zero
- Semi-automatic (push-button) Tare
- Initial Zero Setting Mechanism (IZSM)
- Semi or Fully Automatic Internal Calibration Feature (FACT)
- Automatic Zero Tracking (AZT)
- Liquid Crystal Display (LCD)
- AC/DC Adapter
- Battery Power Supply
- Draft Shield
- RS232 Communication Port
- USB Port
- Remote Printer Capability
- Counting Feature for Prescription Filling (Class I/II only)
- Units : mg, g, kg, lb, oz, ozt, GN, dwt, and ct display capability (may be set-up with any 2 listed units)
- Platter Size: 90 mm diameter, 127 mm x 127 mm to 351 mm x 245 mm

Temperature Range: 10 ºC to 30 ºC (50 ºF to 86 ºF) Class I, II / 5 ºC to 40 ºC (41 ºF to 104 ºF) Class II, III

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.

John Gaccione
Chairman, NCWM, Inc.

Stephen Benjamin
Chairman, National Type Evaluation Program Committee

Issued: May 9, 2014

Mettler-Toledo, LLC

Non-Computing Scale / MS Series, PH Series and JP Series

Application: General purpose Class I, II, III weighing applications including analytical, precision and the weighing of jewelry and precious metals.

Model	Analytical /Precision	Gold/ Jewelry	Pharmacy	Capacity	d	e	Accuracy Class	n_{max}
JP10002G/Axx		X		10200g	0.01g	0.1g	I	102000
JP16001G/Axx		X		16200g	0.1g	1g	II	16200
JP32001G/Axx		X		32200g	0.1g	1g	II	32200
JP62001G/Axx		X		62200g	0.1g	1g	II	62200
JP64001G/Axx		X		64200g	0.1g	1g	II	64200
MS203S/Axx	X			220g	0.001g	0.01g	II	22000
MS303S/Axx	X			320g	0.001g	0.01g	II	32000
MS403S/Axx	X			420g	0.001g	0.01g	II	42000
MS503S/Axx	X			520g	0.001g	0.01g	II	52000
MS603S/Axx	X			620g	0.001g	0.01g	II	62000
MS802S/Axx	X			820g	0.01g	0.1g	II	8200
MS803S/Axx	X			820g	0.001g	0.01g	II	82000
MS1002S/Axx	X			1020g	0.01g	0.1g	II	10200
MS1003S/Axx	X			1020g	0.001g	0.01g	I	102000
MS1602S/Axx	X			1620g	0.01g	0.1g	II	16200
MS2001S/Axx	X			2200g	0.1g	0.1g	II	22000
MS2002S/Axx	X			2200g	0.01g	0.1g	II	22000
*MS2003SDR/Axx	X			2200g	0.01g/0.001g	0.01g	I	220000
MS3001S/Axx	X			3200g	0.1g	0.1g	II	32000
MS3002S/Axx	X			3200g	0.01g	0.1g	II	32000
MS3002SDR/Axx	X			3200g	0.1g/0.01g	0.1g	II	32000
MS4001S/Axx	X			4200g	0.1g	0.1g	II	42000
MS4002S/Axx	X			4200g	0.01g	0.1g	II	42000
MS4002SDR/Axx	X			4200g	0.1g/0.01g	0.1g	II	42000
MS5001S/Axx	X			5200g	0.1g	1g	II	5200
MS5002S/Axx	X			5200g	0.01g	0.1g	II	52000
MS6001S/Axx	X			6200g	0.1g	1g	II	6200
MS6002S/Axx	X			6200g	0.01g	0.1g	II	62000
MS6002SDR/Axx	X			6200g	0.1g/0.01g	0.1g	II	62000
MS8000S/Axx	X			8200g	1g	1g	II	8200
MS8001S/Axx	X			8200g	0.1g	1g	II	8200
MS8002S/Axx	X			8200g	0.01g	0.1g	II	82000
*MS10001S/Axx	X			10200g	0.1g	1g	II	10200
MS10002S/Axx	X			10200g	0.01g	0.1g	I	102000
*MS10002SDR/Axx	X			10200g	0.1g/0.01g	0.1g	I	102000
MS10001L/Axx	X			10200g	0.1g	1g	II	10200
MS12001L/Axx	X			12200g	0.1g	1g	II	12200
MS16001L/Axx	X			16200g	0.1g	1g	II	16200
MS20001L/Axx	X			20200g	0.1g	1g	II	20200
MS24001L/Axx	X			24200g	0.1g	1g	II	24200
MS30001L/Axx	X			30200g	0.1g	1g	II	30200
MS32000L/Axx	X			32200g	1g	1g	II	32200
MS32001L/Axx	X			32200g	0.1g	1g	II	32200

Mettler-Toledo, LLC

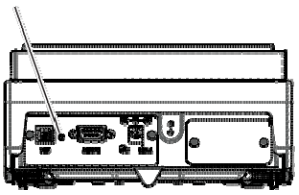
Non-Computing Scale / MS Series, PH Series and JP Series

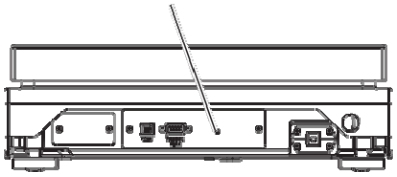
MS32001LDR/Axx	X			32200g	1g/.01g	1g	II	32200
MS40001L/Axx	X			40200g	0.1g	1g	II	40200
MS50001L/Axx	X			50200g	0.1g	1g	II	50200
MS62001L/Axx	X			62200g	0.1g	1g	II	62200
*MS64001L/Axx	X			64200g	0.1g	1g	II	64200
MS64001LDR/Axx	X			64200g	1g/0.1g	1g	II	64200
MS10KLE/Axx	X			10000g/6000g	5g/2g	5g/2g	III	2000/3000
MS12KLE/Axx	X			12000g/6000g	5g/2g	5g/2g	III	2400/3000
MS15KLE/Axx	X			15000g/6000g	5g/2g	5g/2g	III	3000/3000
MS20KLE/Axx	X			20000g/15000g	10g/5g	10g/5g	III	2000/3000
MS24KLE/Axx	X			24000g/15000g	10g/5g	10g/5g	III	2400/3000
MS30KLE/Axx	X			30000g/15000g	10g/5g	10g/5g	III	3000/3000
MS10KLIPE/Axx	X			10000g/6000g	5g/2g	5g/2g	III	2000/3000
MS12KLIPE/Axx	X			12000g/6000g	5g/2g	5g/2g	III	2400/3000
*MS15KLIPE/Axx	X			15000g/6000g	5g/2g	5g/2g	III	3000/3000
MS20KLIPE/Axx	X			20000g/15000g	10g/5g	10g/5g	III	2000/3000
MS24KLIPE/Axx	X			24000g/15000g	10g/5g	10g/5g	III	2400/3000
*MS30KLIPE/Axx	X			30000g/15000g	10g/5g	10g/5g	III	3000/3000
PH303S/Axx			X	320g	0.001g	0.01g	II	32000
PH403S/Axx			X	420g	0.001g	0.01g	II	42000
PH603S/Axx			X	620g	0.001g	0.01g	II	62000
PH1003S/Axx			X	1020g	0.001g	0.01g	I	102000
PH3002S/Axx			X	3200g	0.01g	0.1g	II	32000
PH3002SDR/Axx			X	3200g	0.1g/0.01g	0.1g	II	32000
PH4002S/Axx			X	4200g	0.01g	0.1g	II	42000
PH16001S/Axx			X	16200g	0.1g	1g	II	16200
PH32001S/Axx			X	32200g	0.1g	1g	II	32200

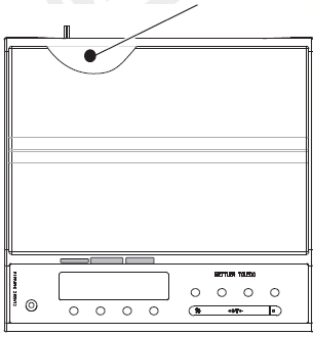
Identification: The required information appears on an adhesive label applied to the side of the scale.
* Indicates models that were evaluated for family approval.

Sealing: The scale will be sealed with a self-destructive seal and plug over the opening on the back of the instrument to prevent access to the calibration switch. Additionally a physical wire or self-destructive paper seal is applied to seal the top and bottom enclosure preventing access to the calibration switch.

Placement of Self-destructive Seals:


Seal on Back of Enclosure

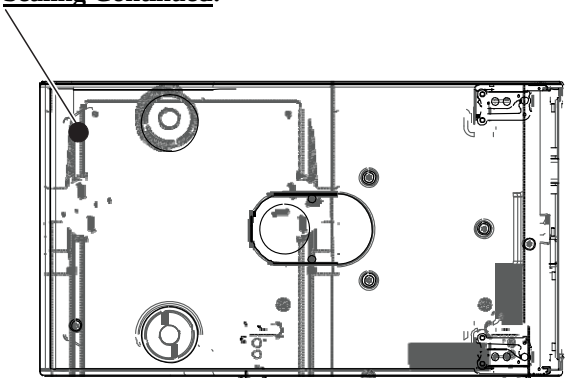

Seal on Back of Enclosure


Seal on Top of Enclosure

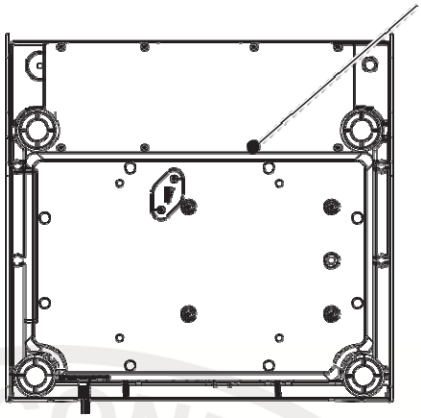
Mettler-Toledo, LLC

Non-Computing Scale / MS Series, PH Series and JP Series

Sealing Continued:



Seal on Bottom of Enclosure



Seal on Bottom of Enclosure

Wire Seal:

Operation: Models with FACT have a fully automatic feature that internally re-calibrates the scale if temperature changes enough to affect accurate weighing or periodically after a predetermined time.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 12-045 and is issued to include additional models. The additional models are JP10002G/Axx and MS10002S/Axx. These models are derived from model MS10002SDR/Axx that was evaluated for family approval. No testing was deemed necessary. Previous test conditions are listed below for reference.

Certificate of Conformance 12-045: This device was submitted to and evaluated by Measurement Canada under the U.S. and Canadian MRA. The emphasis of the evaluation was on device design, operation, performance, and compliance with influence factor requirements. Tests to verify compliance with zero, zone of uncertainty and motion detection requirements were performed. A check-list was completed and several increasing/decreasing and shift tests were performed. The various scales (see Identification section note) were tested over specific temperature ranges as listed in Standard Features and Options. A load of approximately one-half capacity was applied to the scale over 100 000 times. The scale was tested periodically over this time. Voltage variation tests were also performed. The technical data was reviewed by the Ohio NTEP laboratory for compliance with Publication 14 and NIST Handbook 44 requirements.

Evaluated By: J. Rae (MC); J. Morrison (OH) 12-045

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2014. NCWM, Publication 14: Weighing Devices, 2014.

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

Mettler-Toledo, LLC

Non-Computing Scale / MS Series, PH Series and JP Series

Information Reviewed By: J. Truex (NCWM) 12-045, 12-045A1

Examples of Device: