

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Hanging Scale Load Cell Electronic Model: MSI-4260 n<sub>max</sub>: 2,000 Capacity: 2,000 lb Accuracy Class: III

Submitted By: Contact Info. Updated: November 2012 Measurement Systems International (MSI) 230 W. Coleman St. Rice Lake, WI 54868 Tel: 715-234-9171 Fax: 715-234-6967 Contact: Paul A. Lewis, Sr. Email: plewis@ricelake.com Web site: www.ricelake.com

# **Standard Features and Options** Semi-automatic zero with motion detection Self-contained battery operation with a low battery indication Liquid crystal display Semi-automatic tare Stationary hook **Options:** LED display Remote on, zero, tare for all scales capacities. Other Capacity: 500 X 0.2 lb

Temperature Range: -10 °C to 40 °C (14 °F to 104 °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.

Stephen Benjamin Chairman, NCWM, Inc.

Kurt Floren

Committee Chair, National Hype Evaluation Program Committee Issued: November 21, 1989

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## **Measurement Systems International (MSI)**

Hanging Scale / MSI-4260

Application: For use as a heavy duty hanging scale. Basically the same design as the MSI-4260-01 family of crane scales.

**Identification:** A metal identification plate is riveted to the face of the scale above the display.

<u>Sealing</u>: On the right side of the device is a calibration access plug. A lead and wire seal should be threaded through the hole in the calibration access plug and a hole in the adjacent bolt that secures the right side of the casing.

<u>Test Conditions</u>: The emphasis of this evaluation was on the device design, operation, and compliance with influence factor requirements. Several increasing/decreasing load tests and shift tests were performed. The scale was tested in a chamber over a temperature range of -10 to 40  $^{\circ}$ C (14 to 104  $^{\circ}$ F). A load of approximately one-half scale capacity was applied to the scale 102,610 times. The scale was tested periodically during this time. The results of the evaluation indicate the scale complies with the applicable requirements.

Evaluated By: B. Badenhop & J. Truex

**Type Evaluation Criteria Used:** *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices,* 1989 Edition. *NCWM Publication 14 Weighing Devices,* 1989 Edition.

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

Information Reviewed By: J. Truex (NCWM)





NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

Crane Scale

**Digital Electronic** Model: MSI-4260-01 n<sub>max</sub>: 5 000 Capacity: 50,000 x 10lbs. Accuracy Class: III L

For:

\*Submitted By: Contact Info. Updated: November 2012 Measurement Systems International (MSI) 230 W. Coleman St. Rice Lake, WI 54868 Tel: 715-234-9171 Fax: 715-234-6967 Contact: Paul A. Lewis, Sr. Email: plewis@ricelake.com Web site: www.ricelake.com

#### **Standard Features and Options**

Semi-automatic zero with motion detection Self-contained battery operation with a low battery indication Liquid crystal display Lock button to maintain power until manually turned off Digital or pushbutton tare capability **Optional Capacities:** 5,000 x 1 lb.; 10,000 x 2 lb.; 20,000 x 5 lb 30,000 x 10 lb; 50,000 x 10 lb.; 70,000 x 20 lb Scales with serial numbers greater than 11933 have been modified to comply with influence factor requirements. **Options:** LED display Remote on, zero, tare for all scales capacities.

Temperature Range: -10 °C to 40 °C (14 °F to 104 °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.

Stephen Benjamin Chairman, NCWM, Inc.

Kurt Floren

Committee Chair, National Type Evaluation Program Committee Issued: April 19, 1989

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## **Measurement Systems International (MSI)**

Crane Scale / MSI04260-01

Application: General purpose.

Identification: The identification plate it pop riveted on the top of the scale.

**Sealing:** The scale is sealed with a lead-and-wire security seal on the side of the scale.

<u>Test Conditions</u>: The 50,000 x 10 lb. version (n=5,000) crane scale was submitted for influence factor testing. The electronics are identical to the 20,000 x 10 lb. (n=2,000) version that received an NBS Report of Test Number 580. The scale was tested for accuracy and time dependence over a temperature range of -10 °C to 40 °C. Additionally, the 50,000 x 10 lb. version was tested to capacity on a dead weight test machine. The scale was placed into service and used for approximately 60 days before it was retested. The results of this examination and the NBS Report of Test Number 580 indicate these scales comply with applicable requirements.

Evaluated By: S. Cook (NIST)

**Type Evaluation Criteria Used:** *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices,* 1988 Edition. *NCWM Publication 14 Weighing Devices,* 1988 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: J. Truex (NCWM)

