National Conference on Weights and Measures

15245 Shady Grove Road, Suite 130 • Rockville, MD 20850

Certificate Number: 95-072A2 Page 1 of 2

National Type Evaluation Program Certificate of Conformance for Weighing and Measuring Devices

For:

Bench Scale Weighing/Load Receiving Element Load Cell Electronic Models: BMXXXX-YYY* Series and RL2100 n_{max}: 5000 e_{min}: 0.001 lb (0.0005 kg) See Below Capacity: 5 lb (2.5 kg) to 1000 lb (500 kg) See Below Platform: See Below Accuracy Class: III

Submitted by:

Rice Lake Weighing Systems 230 West Coleman Street Rice Lake, WI 54868 Tel: (715) 234-9171 Fax: (715) 234-6967 Contact: Deb Harings-Lehman

Standard Features and Options

*The specific model designation for the BM Series covered by this certificate is BMXXXX-YYY where XXXX represents the scale dimensions in inches and the YYY represents the scale capacity in pounds. An "S" following the platform size designates stainless steel frame.

 Capacity:
 BM Series:
 5 lb x 0.001 lb to 1000 lb x 0.2 lb (2.5 kg x 0.0005 kg to 500 kg x 0.1 kg)

 RL2100:
 5 lb x 0.001 lb to 100 lb x 0.02 lb (2.5 kg x 0.0005 kg to 50 kg x 0.01 kg)

 Platform size:
 BM Series:
 10" x 10" to 24" x 24"

 RL2100:
 10" x 10" to 12" x 12"

Frame: Mild or stainless steel Platform material: Stainless steel

Load cell used: Rice Lake Model RL1040-N5 (Certificate of Conformance Number 95-074), Rice Lake Model RL1250-N5 (Certificate of Conformance Number 95-075), Rice Lake Model RL1380 (Certificate of Conformance Number 94-128),

Rice Lake Model RL1042 (Certificate of Conformance Number 97-138), or compatible and certified equivalent load cells.

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

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of 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.

Effective Date: December 28, 1999

Louis & Straub

Louis E. Straub Chairman, NCWM, Inc.

Walton fry

G. Weston Diggs Chairman, National Type Evaluation Program Committee Issue date: April 5, 2000

Note: The National Conference on Weights and Measures 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.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

Rice Lake Weighing Systems Bench Scale Weighing/Load Receiving Element Models: BMXXXX-YYY Series and RL2100

<u>Application</u>: For use in general purpose weighing when interfaced with a compatible and certified electronic indicating element.

Identification: The required information is on an approved label located on the base of the weighing element.

- **Sealing:** There are no sealable parameters located on the load receiving element. The scale calibration and set-up parameters are sealed through the indicating element.
- **Test Conditions:** This Certificate supersedes Certificate of Conformance Number 95-072A1 and is issued to add a new model (RL2100) to the existing Certificate. The emphasis of the evaluation was on the device design, marking, performance and compliance with influence factor requirements. Two model RL2100 weighing elements, a 5 lb x 0.001 lb (2.5 kg x 0.0005 kg) and a 100 lb x 0.02 lb (50 kg x 0.01 kg), were evaluated in the laboratory. Several increasing/decreasing load and shift tests were performed. A load of approximately one-half capacity was applied to the scales over 100 000 times. The devices were tested over a temperature range of −10 °C to 40 °C (14 °F to 104 °F). Previous test conditions are repeated below for reference.

<u>Certificate of Conformance Number 95-072A1</u>: This Certificate superseded Certificate of Conformance Number 95-072 and was issued to amend the original test conditions to include an additional capacity of the scale family that was submitted and tested but not included.

<u>Certificate of Conformance Number 95-072</u>: The emphasis of the evaluation was on the device design, marking, performance and compliance with influence factor requirements. Two weighing elements, a 5 lb x 0.001 lb (2.5 kg x 0.0005 kg) and a 1000 lb x 0.2 (500 kg x 0.1 kg), were evaluated in the laboratory. Several increasing/decreasing load and shift tests were performed. A load of approximately one-half capacity was applied to the scales over 107 280 times. The devices were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F).

The results of the evaluations indicate the scales comply with applicable requirements of NIST handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 2000 Edition

<u>Tested By:</u> W. West & A. McCoy (OH) 95-072; A. McCoy (OH) 95-072A1; A. McCoy & E. Matthews (OH) 95-072A2