

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

**For:**

Load Cell  
Three Beam Single Point  
Models: RL1010 and RL1015  
 $n_{\max}$ : Single Cell: 5000  
Capacity: 5 kg to 50 kg

Accuracy Class: III

**Submitted by:**

Rice Lake Weighing Systems  
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**Standard Features and Options**

Capacity (kg)	$v_{\min}$ (kg)	Minimum Dead Load (kg)
5	0.0005	0
7	0.0007	0
10	0.0010	0
11.36	0.0012	0
15*	0.0015	0
20	0.0020	0
30	0.0030	0
50	0.0050	0

\* Two load cells submitted for test

The Model RL1015 is identical to Model RL1010 except that the internal electronics of the load cell has been modified to produce an electrically symmetric design and should **NOT** be used with zero circuits that are sensitive to a change in load cell symmetry.

Nominal output: 2.0 mV/V  
Cable type: 6-wire

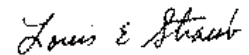
Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

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: May 16, 2000



Ronald D. Murdock  
Chairman, NCWM, Inc.



Louis E. Straub  
Chairman, National Type Evaluation Program Committee

Issue date: June 13, 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  
Three Beam, Single Point Load Cell  
Models: RL1010 and RL1015**

**Application:** The load cells may be used in Class III scales for single cell applications consistent with the model designations, number of scale divisions, and parameters specified in this Certificate. Load cells of a given accuracy class may be used in applications with lower accuracy class requirements provided the number of scale divisions, the  $v_{\min}$  values, and temperature range are suitable for the application. The manufacturer may market the load cell with fewer divisions ( $n_{\max}$ ) and with larger  $v_{\min}$  values than those listed on the Certificate. However, the load cells must be marked with the appropriate  $n_{\max}$  and  $v_{\min}$  for which the load cell may be used.

**Identification:** A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is located on the load cell. All other required information, if not marked on the load cell, must be on an accompanying document including the serial number of the load cell.

**Test Conditions:** This Certificate is issued based on the following tests and upon information provided by the manufacturer. Three 15-kg capacity load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for single load cell applications. The cells were tested over a temperature range of  $-10\text{ }^{\circ}\text{C}$  to  $40\text{ }^{\circ}\text{C}$ . Three tests were run on each cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was done. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure.

The results of the evaluation and information provided by the manufacturer indicate the load cells comply with applicable requirements of NIST Handbook 44.

**Type Evaluation Criteria Used:** NIST Handbook 44, 2000 Edition

**Tested By:** NIST Force Group, NIST Office of Weights and Measures

**Information Reviewed By:** L. Sebring (NIST) and G. Newrock (NIST)