



NATIONAL TYPE EVALUATION PROGRAM

*Certificate of Conformance*  
*for Weighing and Measuring Devices*

**For:**

Load Cell  
Double Ended Shear Beam  
Model: RL Series  
Multiple Cells  $n_{max}$ : 10 000  
Capacity: 20 000 to 200 000 lb  
Accuracy Class: III L

**\*Submitted By: Contact Info. Updated: January 10**

Rice Lake Weighing Systems  
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](mailto:plewis@ricelake.com)  
Web site: [www.ricelake.com](http://www.ricelake.com)

**Standard Features and Options**

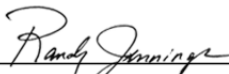
\*The specific load cells covered by this Certificate are identified in the table on page 2.

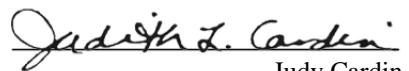
**Standard Features:**

- Nominal Output: 3.0 mV/V
- Cable: 4- wire Design
- Counterforce Material: Alloy Steel (denoted by "A"), Stainless Steel (denoted by "S")

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.

  
Randy Jennings  
Chairman, NCWM, Inc.

  
Judith Cardin  
Chairman, National Type Evaluation Program Committee  
Issued: January 25, 2010

**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.



## Rice Lake Weighing Systems

### Load Cell / RL Series

**Application:** The load cells may be used in Class III L scales for multiple cell applications consistent with the model designations and parameters specified in this certificate.

#### **Model Designations and Load Cell Parameters:**

Model		Capacity (lb)	$v_{\min}$ (lb)	Minimum Dead Load (lb)
RL75040A-20K	RL75040S-20K	20 000	0.8	1000
RL75040A-25K	RL75040S-25K	25 000	1.0	1250
RL75040A-30K	RL75040S-30K	30 000	1.2	1500
RL75040A-40K	RL75040S-40K	40 000	1.6	2000
RL75040A-50K	RLBD50000S-50K	50 000	2.0	2500
RL75040A-60K	RL75040S-60K	60 000	2.4	3000
RL75040A-65K	RL75040S-65K	65 000	2.6	3250
RL75040A-75K	RL75040S-75K	75 000	3.0	3750
RL75040A-90K	RL75040S-90K	90 000	3.6	4500
RL75040A-100K	RL75040S-100K	100 000	4.0	5000
RL75040A-125K	RL75040S-125K	125 000	5.0	6250
RL75040A-150K	RL75040S-150K	150 000	6.0	7500
RL75040A-200K	RL75040S-200K	200 000	8.0	10 000

**Test Conditions:** This certificate is issued based upon the following tests and upon information provided by the manufacturer. This Certificate supersedes Certificate of Conformance Number 92-018 and is issued to add the suffix "S" to the model designation, which denotes load cells constructed of stainless steel, and add additional capacities. One 50 000-lb capacity load cell of stainless steel construction was tested at NIST FG using dead weights as the reference standard. The data were analyzed for multiple load cell applications. The cell was tested over a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$ . Three tests were run on the cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure. The previous test conditions are listed below for reference.

**Certificate of Conformance Number 92-018:** This certificate is issued based upon the following tests and upon information provided by the manufacturer. Two 50,000-lb capacity load cells were tested using dead weights as the reference standard. The data were analyzed for multiple load cell applications. The cells were tested over a temperature range of  $-10$  to  $40^{\circ}\text{C}$ . Three tests were run on each cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure. The manufacturer's laboratory was used to collect the test data. Representatives from the National Institute of Standards and Technology evaluated the manufacturer's test facility, witnessed repeat tests on the load cells, and analyzed the data. The results indicate that the load cells comply with the applicable requirements of NBS Handbook 44.

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

**Type Evaluation Criteria Used:** NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 1996. NCWM, Publication 14: Weighing Devices, 1996.

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

**Information Reviewed By:** S. Patoray, L. Bernetich (NCMW) 92-018A1