National Conference on Weights and Measures

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Certificate Number: 97-126 Page 1 of 2

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

For:

Load Cell Double-Ended Shear Beam Model: RL75223A-Z Series n_{max}, Multiple Cell: 10 000 Capacity: 20 000 lb to 200 000 lb

Accuracy Class: III L

Submitted by:

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

Standard Features and Options

*The specific capacities, v_{min} values, and minimum dead loads of load cells covered by this Certificate are listed in the table on Page 2 and are identified by the model designation RL75223A-Z, where the A character when represented by an "A" indicates a load cell constructed of alloy steel or "AS" denotes a load cell constructed of stainless steel; and the Z character which represents the load cell capacity.

Nominal Output: 3.0 mV/V 4-wire design

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: October 14, 1997

Louis & Straut

Louis E. Straub Chairman, NCWM, Inc.

Waleston Aleg

G. Weston Diggs Chairman, National Type Evaluation Program Committee Issue date: July 29, 1998

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 Double-Ended Shear Beam Load Cell Model: RL75223A-Z Series

- **<u>Application:</u>** The load cells may be used in Class III L scales for multiple 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, 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 on the load cell. All other required information must be on an accompanying document including the serial number of the load cell.

Model Designations and Load Cell Parameters			
Model	Capacity (lb)	v _{min} (lb)	Minimum Dead Load (lb)
RL75223A-20K	20 000	0.8	1000
RL75223A-25K	25 000	1.0	1250
RL75223A-30K	30 000	1.2	1500
RL75223A-40K	40 000	1.6	2000
RL75223A-50K	50 000	2.0	2500
RL75223A-60K	60 000	2.4	3000
RL75223A-65K	65 000	2.6	3250
RL75223A-75K	75 000	3.0	3750
RL75223A-90K	90 000	3.6	4500
RL75223A-100K	100 000	4.0	5000
RL75223A-125K	125 000	5.0	6250
RL75223A-150K	150 000	6.0	7500
RL75223A-200K	200 000	8.0	10 000

Test Conditions: This Certificate is issued based on the following tests and 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 °C to 40 °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. Representatives of NIST evaluated the manufacturer's test facility, witnessed repeat tests on the load cells, and analyzed the data.

The results of the evaluations indicate that the load cells comply with the applicable requirements.

Type Evaluation Criteria Used: NIST Handbook 44, 1997 Edition

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

Information Reviewed By: L. T. Sebring (NIST) 97-126