

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

For:

Load Cell
 Tension "S" Type, Stainless Steel
 Model: RL20001HE
 n_{max} : Class III Single or Multiple Cells: 5000
 n_{max} : Class III L Single or Multiple Cells: 10 000
 Capacity: 500 lb to 5000 lb

Accuracy Class: III/III L

Submitted by:

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Standard Features and Options

Model	Capacity (lb) *	Class III Single n_{max} : 5000 v_{min} (lb)	Class III Multiple n_{max} : 5000 v_{min} (lb)	Class III L Single n_{max} : 10 000 v_{min} (lb)	Class III L Multiple n_{max} : 10 000 v_{min} (lb)
RL20001HE-500	500	0.05	0.05	0.02	0.02
RL20001HE-750	750	0.075	0.075	0.03	0.03
RL20001HE-1K	1000	0.10	0.10	0.04	0.04
RL20001HE-1.5K	1500	0.15	0.15	0.06	0.06
RL20001HE-2K	2000	0.20	0.20	0.08	0.08
RL20001HE-2.5K	2500	0.25	0.25	0.10	0.10
RL20001HE-3K	3000	0.30	0.30	0.12	0.12
RL20001HE-4K	4000	0.40	0.40	0.16	0.16
RL20001HE-5K	5000	0.50	0.50	0.20	0.20

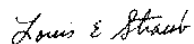
* Load cells may have a nominal capacity different from those listed above if the capacities are between 500 lb and 5000 lb, they comply with the conditions listed in the "Application" section, and the v_{min} meets the following formula. For (Class III cells) $v_{min} = \text{capacity} \div 10\,000$, and (Class III L cells) $v_{min} = \text{capacity} \div 25\,000$.

Minimum dead load: 0.0 lb 4 wire design

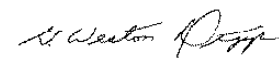
Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

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: September 8, 1998



Louis E. Straub
 Chairman, NCWM, Inc.



G. Weston Diggs
 Chairman, National Type Evaluation Program Committee

Issue date: May 26, 1999

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
Tension "S" Type, Stainless Steel Load Cell
Model: RL20001HE

Application: The load cells may be used in Class III and III L scales for both single and 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, 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. One 500-lb and one 5000-lb capacity load cell were tested at NIST using dead weights as the reference standard. The data were analyzed for both single and 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.

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, 1998 Edition

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

Information Reviewed By: L. T. Sebring (NIST)