

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

For:

Load Cell
S-Beam Tension
Model: RL20000SS
n_{max}: Single and Multiple Cells, Class III: 3000
n_{max}: Single and Multiple Cells, Class III L: 10 000
Capacity: 100 lb to 10 000 lb, 50 kg to 5.0 t
Accuracy Class: III/III L

Submitted by:

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Standard Features and Options

*The specific load cell capacities, v_{min} values, and minimum dead loads are listed in the tables on Page 2.

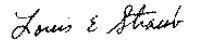
The RL20000SS Series is identified by the model designation RL20000SS followed by a numeric suffix, which represents the load cell capacity.

Nominal output: 3 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: May 4, 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
S-Beam Tension Load Cell
Model: RL2000SS**

Model Designation:

Capacity		Class III v_{\min} (lb)	Class III L v_{\min} (lb)	Minimum Dead Load (lb)
Model	lb			
100*	100	0.010	0.003	2
150	150	0.015	0.005	2
200	200	0.020	0.006	2
250	250	0.025	0.008	2
300	300	0.030	0.010	2
500*	500	0.050	0.016	5
750	750	0.080	0.025	5
1K	1000	0.100	0.033	10
1.5K	1500	0.150	0.050	10
2K	2000	0.200	0.066	10
2.5K	2500	0.250	0.075	10
3K*	3000	0.300	0.100	10
5K	5000	0.500	0.160	10
10K	10 000	1.000	0.330	10
* Load Cells submitted for evaluation				

Capacity		Class III (kg)	Class III L (kg)	Minimum Dead Load (kg)
Model	kg			
50 kg	50	0.006	0.002	0.9
0.1 t	100	0.011	0.003	0.9
0.25 t	250	0.028	0.008	2.3
0.50 t	500	0.055	0.017	4.5
1.00 t	1000	0.110	0.033	4.5
2.50 t	2500	0.275	0.083	4.5
5.00 t	5000	0.550	0.165	4.5

Application: The load cells may be used in Class III and III L scales for single or 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.

**Rice Lake Weighing Systems
S-Beam Tension Load Cell
Model: RL2000SS**

Test Conditions: This Certificate is issued based on the following tests and upon information provided by the manufacturer. One 100-lb, one 500-lb, and one 3000-lb capacity load cells were tested at the manufacturer's facility using dead weights as the reference standard. The data were analyzed for both single and multiple load cell applications. The cell was 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 from NIST evaluated the manufacturer's test facility, witnessed repeat tests on load cells, and analyzed the data.

The results of the evaluations indicate that the load cells comply with the 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: G. Newrock (NIST), T. Ahrens (NIST)