



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: 3 000 $n_{\max}$ 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: Contact Info. Updated November 2022

Rice Lake Weighing Systems

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Email: bbowers@ricelake.comWeb site: www.ricelake.com**Standard Features and Options**

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

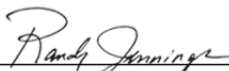
The RL20000SS Series is identified by the model designation RL20000SS followed by a numeric suffix, which represents the load cell capacity.

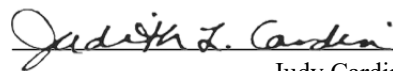
Standard Features:

- 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 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: May 26, 1999

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**Rice Lake Weighing Systems**

Load Cell / RL20000SS

Model Designations:

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 $v_{\min}$ (kg)	Class III L $v_{\min}$ (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.

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.

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, 1998. NCWM, Publication 14: Weighing Devices, 1998.



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

Information Reviewed By: G. Newrock (NIST), T. Ahrens (NIST)

