

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

For:

Load Cell; Multi-Column Compression
Model: RLCSP1-XXX Series
 n_{max} : Single Cell, Class III: 3000
Multiple Cell, Class III: 5000
Single Cell, Class III L: 6000
Multiple Cell, Class III L: 10 000

Accuracy Class: III/III L

Submitted by:

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Standard Features and Options

The models of load cells covered by this certificate are the RLCSP1 Series which is designated with the suffix XXX which represents the load cell capacity.

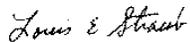
The specific load cell parameters for the models covered by this certificate are on page two.

Minimum Dead Load: 0.0 lb
Nominal output: 2 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 6, 1995



Louis E. Straub
Chairman, NCWM, Inc.



G. Weston Diggs
Chairman, National Type Evaluation Program Committee

Issue date: August 8, 1996

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
Multi-Column Compression Load Cell
Model: RLCSP1-XXX

Application: The load cells may be used in both 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.

Load Cell Parameters

Model	Capacity (lb)	Class III v_{\min} (lb)		Class III L v_{\min} (lb)	
		Single Cell (n_{\max} : 3000)	Multiple Cells (n_{\max} : 5000)	Single Cell (n_{\max} : 6000)	Multiple Cells (n_{\max} : 10 000)
RLCSP1-25K	25 000	2.5	1.6	1.3	0.8
RLCSP1-35K	35 000	3.5	2.3	1.8	1.1
RLCSP1-50K	50 000	5.0	3.3	2.5	1.6
RLCSP1-60K	60 000	6.0	4.0	3.0	2.0
RLCSP1-75K	75 000	7.5	5.0	3.7	2.4
RLCSP1-100K	100 000	10.0	6.7	5.0	3.3
RLCSP1-125K	125 000	12.5	8.2	6.2	4.1
RLCSP1-150K	150 000	15.0	10.0	7.5	4.8
RLCSP1-200K	200 000	20.0	13.3	10.0	6.6
RLCSP1-250K	250 000	25.0	16.7	13.0	8.2
	Capacity (kg)	Class III v_{\min} (kg)		Class III L v_{\min} (kg)	
RLCSP1-10t	10 000	1.0	0.6	0.5	0.3
RLCSP1-25t	25 000	2.5	1.6	1.3	0.8
RLCSP1-40t	40 000	4.0	2.6	2.0	1.3
RLCSP1-60t	60 000	6.0	4.0	3.0	2.0
RLCSP1-100t	100 000	10.0	6.7	5.0	3.3

Test Conditions: This Certificate is issued based on the following tests and upon information supplied by the manufacturer. Two stainless steel 50 000-lb capacity load cells 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.

Type Evaluation Criteria Used: NIST Handbook 44, 1995 Edition

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

Information Reviewed By: L. Sebring (NIST)