



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance
for Weighing and Measuring Devices

For:

Load Cell (Force Transducer)
Beam
Model: SLB515 & SLB815 Series
 n_{max} : 5000, Multiple Cell
Capacity: 220 kg to 4400 kg (500 lb to 10 000 lb)
Accuracy Class: III

Submitted By:

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Standard Features and Options

- The specific load cells covered by this Certificate are identified by the load cell capacities (see table below).
- Excitation Voltage: 5 – 15V AC/DC
- Counterforce Material: Stainless steel
- 4 wire
- 2 mV/V

Load Cell Parameters:

Capacity	V_{min}	Minimum Dead Load
220 kg* / 500 lb	0.02 kg / 0.04 lb	0 kg
550 kg / 1250 lb	0.05 kg / 0.11 lb	0 kg
1100 kg* / 2500 lb	0.08 kg / 0.17 lb	0 kg
2200 kg / 5000 lb	0.16 kg / 0.35 lb	0 kg
4400 kg / 10 000 lb	0.31 kg / 0.69 lb	0 kg

*Load cells tested

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.

Ronald Hayes
Chairman, NCWM, Inc.

John Gaccione
Chairman, National Type Evaluation Program Committee
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Mettler-Toledo, LLC

Load Cell / SLB515 & SLB815 Series

Application: The load cells may be used in Class III 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, the v_{\min} values, and temperature range are suitable for the application. The manufacturer may market the load cells with fewer scale 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: Two Model SLB (220 kg capacity, 1100 kg capacity) load cells were tested by the NIM at the Beijing facility. Testing was conducted in accordance with the OIML DoMC Mutual Acceptance Arrangement, signed by the NCWM as a utilizing participant for load cell testing. Testing was conducted using deadweights as the reference standard. The load cells were tested over a temperature range of $-10\text{ }^{\circ}\text{C}$ to $40\text{ }^{\circ}\text{C}$ with tests 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 conducted on these load cells. The data was analyzed for multiple load cell applications. OIML R60 selection criteria was used to determine cells tested.

Evaluated By: NIM Beijing, China

Type Evaluation Criteria Used: *NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*, 2015. NCWM, *Publication 14: Weighing Devices*, 2015 Edition.

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

Information Reviewed By: J. Truex (NCWM)

Example of Device:

