



NATIONAL TYPE EVALUATION PROGRAM

*Certificate of Conformance*  
*for Weighing and Measuring Devices*

**For:**

Load Cell  
Compression  
Model: SLC611  
 $n_{max}$ : 5000, Single and Multiple Cell, Class III  
10 000, Single and Multiple Cell, Class IIIIL  
Capacity: 5 mt to 22.5 mt (11 000 lb to 50 000 lb)  
Accuracy Class: III/ IIIIL

**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).

- Nominal Output: 2 mV/V
- Excitation Voltage: 5-20 AC/DC
- Minimum dead load: 0 kg
- Counterforce Material: Stainless Steel
- 4 Wire Design

**Load Cell Parameters:**

Capacity	$V_{min}$	Minimum Dead Load
5 mt* / 11 000 lb	0.27 kg / 0.59 lb	0 kg
7.5 mt / 17 000 lb	0.40 kg / 0.88 lb	0 kg
10 mt / 22 000 lb	0.53 kg / 1.16 lb	0 kg
15 mt / 33 000 lb	0.79 kg / 1.74 lb	0 kg
22.5 mt / 50 000 lb	1.19 kg / 2.62 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 / SLC611

**Application:** The load cells may be used in Class III Scales and Class IIIIL Scales for 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 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:** A Model SLC611 (5 metric ton capacity) load cell was tested by the NIM Beijing, China 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  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  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 the load cells. The data were analyzed for single load cell applications. OIML R60 selection criteria was used to determine cells tested.

**Evaluated By:** NMI 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, 2014.

**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:**

