



## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

Load Cell

Beam, Single Point

Model: WL 1241, WL 1243 &amp; WL 1245 Series

 $n_{\max}$ : 6000, Class III, Single Cell & Multiple Cell

Capacity: 50 kg to 500 kg

Accuracy Class: III

**Submitted By:**

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Email: [sales@acecellschina.com](mailto:sales@acecellschina.com)Web site: [www.acecellschina.com](http://www.acecellschina.com)**Standard Features and Options**

- Model WL 1241, WL 1243 & WL 1245 Series, specific load cell capacities and  $v_{\min}$  values are listed in the table below.
- Nominal output: 2.2 mV/V
- Aluminum material
- 4 wire design
- Minimum Dead Load: 0 kg

| Models            | Capacity | $V_{\min}$ Class III<br>Single Cell | $V_{\min}$ Class III<br>Multiple Cell | $n_{\max}$ |
|-------------------|----------|-------------------------------------|---------------------------------------|------------|
| WL 1241           |          |                                     |                                       |            |
| WL 1243           | 50 kg    | 0.0033 kg                           | 0.0033 kg                             | 6000       |
| WL 1245           | 60 kg*   | 0.004 kg                            | 0.004 kg                              | 6000       |
| *Load Cell Tested | 100 kg   | 0.0066 kg                           | 0.0066 kg                             | 6000       |
|                   | 150 kg   | 0.010 kg                            | 0.010 kg                              | 6000       |
|                   | 200 kg   | 0.013 kg                            | 0.013 kg                              | 6000       |
|                   | 250 kg   | 0.016 kg                            | 0.016 kg                              | 6000       |
|                   | 300 kg   | 0.020 kg                            | 0.020 kg                              | 6000       |
|                   | 500 kg   | 0.033 kg                            | 0.033 kg                              | 6000       |

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.

Jerry Buendel  
Chairman, NCWM, Inc.

Ronald Hayes  
Chairman, National Type Evaluation Program Committee  
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**Acccells Instruments Ltd.**

## Load Cell / WL 1241, WL 1243 &amp; WL 1245 Series

**Application:** The load cells may be used in Class III scales for single cell 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  $v_{\min}$  value, and temperature range are suitable for the application. The manufacturer may market the load cell with fewer divisions ( $n_{\max}$ ) and with greater  $v_{\min}$  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 label located on the cell, states manufacturer name, model, serial number, rated capacity, class, NTEP certificate number,  $n_{\max}$  and  $v_{\min}$ . Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

**Test Conditions:** A model WL 1241, 60kg load cell was tested by the NMi Certain B.V. at The Netherlands 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 °C to 40 °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 to determine sensitivity of the load cell design to changes in barometric pressure was conducted. The data were analyzed for single load cell applications. OIML R60 selection criteria were used to determine cells tested.

**Evaluated By:** E. van der Grinten, R. Scholten (NMi)

**Type Evaluation Criteria Used:** NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2016. NCWM, Publication 14: Weighing Devices, 2016.

**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)

**Examples of Device:**

WL 1241



WL 1243



WL 1245