

# NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Shear Beam

Model: 102BH and 102BS Series  $n_{max}$ : 10 000, Multiple Cell, Class III L Capacity: 25 000 lb to 125 000 lb

Accuracy Class: III L

# **Submitted By:**

Anyload LLC

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## **Standard Features and Options**

### **Standard Features:**

• Nominal Output: 3.0 mV/V

 Model 102BHxx series is Alloy Steel and Model 102BSxx series is Stainless Steel, where the xx in the model designation may be SE or LE

• 4 Wire Design

• Minimum Dead Load: 0 lb

The specific load cell capacities and v<sub>min</sub> values are listed in the table below. [\*Load Cells Tested]

Model	Capacity	v <sub>min</sub> Class III L Multiple Cell
102BH	25 000 lb*	1.3 lb
102BH	40 000 lb	2.0 lb
102BH	50 000 lb	2.6 lb
102BH	60 000 lb	3.1 lb
102BH	75 000 lb	3.9 lb
102BH	100 000 lb	5.2 lb
102BH	125 000 lb	6.5 lb
102BS	25 000 lb*	1.67 lb
102BS	40 000 lb	2.67 lb
102BS	50 000 lb	3.33 lb
102BS	60 000 lb	4.0 lb
102BS	75 000 lb	5.0 lb
102BS	100 000 lb	6.66 lb
102BS	125 000 lb	8.33 lb

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 *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. \*Editorial changes, not affecting the type or metrological content, corrected this certificate.

Ivan Hankins Chairman, NCWM, Inc. Hal Prince Chair, NTEP Committee Issued: August 31, 2021

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# **Anyload LLC**

### Load Cell / 102BH and 102BS Series

**Application:** The load cells may be used in Class III L 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  $v_{min}$  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.

<u>Identification</u>: A pressure sensitive identification label located on the cell, states manufacturer name, model number, serial number, rated capacity, class,  $v_{min}$ ,  $n_{max}$  and CC number. Other pertinent information will be specified on the Calibration Certificate accompanying the cell.

<u>Test Conditions</u>: This certificate supersedes certificate of conformance 11-021A1 and is issued to update company address and add the SE and LE suffix to the model 102BH and 102BS Series. There are no metrological differences between these models and the ones previously listed. No additional testing was necessary. Previous test conditions are listed below for reference.

Certificate of Conformance Number 11-021A1: A model 102BS (25 000 lb capacity) load cells were 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 cell was tested over a temperature range of -10 °C to 40 °C with tests run 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 multiple load cell applications. OIML R60 selection criteria were used to determine cells tested. Previous test conditions are listed below for reference.

Certificate of Conformance Number 11-021: A Model 102BH (25 000 lb capacity) load cell was tested by the NMi Certin 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 multiple load cell applications. OIML R60 selection criteria was used to determine cells tested.

Evaluated By: A.C Pauwels, R. Scholten (NMi) 11-021; E. van der Grinten, M.M.J. Meijer (NMi) 11-021A1; M. Manheim (NCWM) 11-021A2

<u>Type Evaluation Criteria Used</u>: Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2016 Edition. NCWM Publication 14: Weighing Devices, 2016 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) 11-021, 11-021A1; D. Flocken (NCWM) 11-021A2

# **Example(s) of Device:**





Model 102BH Model 102BS