NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Load Cell
Double Bending Beam
Model: SB14-X-Y Series
n_{max}, Single Cell: 4000
n_{max}, Multiple Cells: 5000
Capacity: 500 lb to 5000 lb

Accuracy Class: III

***Submitted By: Contact Info. Updated October 2025**
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Standard Features and Options

The specific capacities, v_{min} values, and minimum dead loads of load cells covered by this Certificate are listed below. The SB14 Series is identified by the model designation SB14-X-Y, where "X" represents the load cell capacity and "Y" denotes the characters HB which represents a blind loading hole, CU which identifies a counterbored loading hole with unified threads, CM which represents a counterbored loading hole with metric threads, or MT which denotes a blind loading hole with customer specific features that do not affect the metrological characteristics of the load cell.

Model	Capacity (lb)	v_{min} (lb)		Minimum Dead Load (lb)
		Single	Multiple	
SB14-500-Y	500	0.04	0.03	0
SB14-1klb-Y	1000	0.08	0.06	0
SB14-2klb-Y	2000	0.20	0.16	0
SB14-2.5klb-Y	2500*	0.20	0.16	0
SB14-5klb-Y	5000	0.40	0.32	0

* Load cell capacity submitted for type evaluation.

- 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 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: September 9, 1999

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Flintec, Inc.
Load Cell / SB14-X-Y Series

Application: The load cells may be used in Class III 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.

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 2500-lb capacity load cells (HB versions) were tested at NIST using dead weights as the reference standard. The data were analyzed for 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, 1998 Edition

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

Information Reviewed By: J. Williams (NIST) and G. Newrock (NIST)