

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell

Stainless Steel Bending Beam

Model: SB5 Series* n_{max}, Single Cell: 3000 n_{max} Multiple Cells: 5000

Capacity: 5 kN to 50 kN (1000 lb to 10 000 lb)

Accuracy Class: III

*Submitted By: Contact Info. Updated October 2025

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Standard Features and Options

*The specific models covered by this certificate are listed below:

Class III							
Capacity			Single Cell		Multiple Cell		Minimum
Code	kN	lb	N	lb	N	lb	
SB5-5kN	5	-	1.00	-	1.00	-	0
SB5-1K	-	1000	-	0.20	-	0.20	0
SB5-1.25K	-	1250	-	0.25	-/	0.25	0
SB5-10kN	10	-	2.00	-	2.00	-	0
SB5-2.5K	-	2500	-	0.50	-	0.50	0
SB5-20kN	20	-	4.00	-	4.00	- 1 4	0
SB5-5K	-	5000	-	1.00	-	1.00	0
SB5-50kN	50	-	10.00	-	10.00		0
SB5-10K	-	10 000	-	2.00	-	2.00	0

^{** 1} kN (one thousand Newtons) = 224.81 lb (Pounds Force)

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: May 30, 1996

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Flintec, Inc.

Load Cell, Stainless Steel Bending Beam / SB5 Series

<u>Application</u>: The load cells may be used for both Class III and III L 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 manufacture 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.

<u>Test Conditions:</u> This Certificates supersedes Certificate of Conformance (CC) Number 93-134A1 and is issued without additional testing to correct an error in the declared v_{min} values listed in the table on page 1. Previous test conditions are listed below for reference.

<u>Certificate of Conformance 93-134A1:</u> This certificate supersedes CC 93-134 and was issued to add the pound equivalent capacities of 1000 lb, 1250 lb, 2500 lb, 5000 lb, and 10 000 lb.

Certificate of Conformance 93-134: Two 20-kN capacity load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for both 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. The results indicate that the load cells comply with the applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1996 Edition

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

Update reviewed by: D. M. Ripley (NIST)