SB5 1/2 (NTEP)

U.S. Department of Commerce
National Institute of Standards and Technology
Gaithersburg, MD 20899

Certificate Number: 93-134A2

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:

Flintab, Inc.
18 Kane Industrial Drive
Hudson, MA 01749
Tel: (508) 562-4242
Fax: (508) 562-0008
Contact: Harry Lockery

Standard Features and Options

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

Class III							
Capacity			Single Cell v_{min}		Multiple Cell v_{min}		Minimum Dead Load (N) or (lb)
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	-	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

** 1kN (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 (NTEP) 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.

Effective Date: May 21, 1996

Gilbert M. Ugiansky, Ph.D.
Chief, Office of Weights and Measures
Issue Date: May 30, 1996

SB5 2/2 (NTEP)

Flintab, Inc.
Stainless Steel Bending Beam Load Cell
Model: SB5 Series*

Application: 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.

Test Conditions: This Certificates supersedes Certificate of Conformance (CC) Number 93-134 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.

Certificate of Conformance 93-134A1: 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)