SLB 1/2 (NTEP)

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

Certificate Number: 97-061A1

National Type Evaluation Program

Certificate of Conformance

for Weighing and Measuring Devices

For:

Load Cell
Double Bending Beam
Model: SLB Series
n_{max}, Single Cell: 4000
n_{max}, Multiple Cell: 7500
Capacity: 200 lb to 10 000 lb*

Accuracy Class: III

Submitted by:

Flintec, Incorporated
18A Kane Industrial Drive
Hudson, MA 01769
Tel: (978) 562-4242
Fax: (978) 562-0008
Contact: Rolf Haggstrom

Standard Features and Options

*The specific capacities, v_{min} values, and minimum dead loads are listed in the table below.

Model	Capacity (lb)	v_{min} (lb)		Minimum Dead Load (lb)
		Single Cell	Multiple Cell	
SLB-200	200	0.010	0.008	0
SLB-500*	500	0.025	0.020	0
SLB-1K	1000	0.050	0.040	0
SLB-2.5K*	2500	0.12	0.18	0
SLB-5K	5000	0.24	0.36	0
SLB-10K	10 000	0.48	0.72	0
*Load cells of this capacity were submitted for 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 (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: December 18, 1997

Gilbert M. Ugiansky, Ph.D.
Chief, Office of Weights and Measures
Issue Date: March 27, 1998

SLB 2/2 (NTEP)

Flintec, Incorporated
Double Bending Beam Load Cell
Model: SLB 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, 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 on the load cell. All other required information must be on an accompanying document including the serial number of the load cell.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 97-061 and is issued to include the 2500-lb, 5000-lb and 10 000-lb capacity load cells in the SLB Series. Two 2500-lb capacity load cells 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.

The test condition from the previous evaluation is listed below for reference.

Certificate of Conformance Number 97-061: Two 500-lb capacity load cells 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.

The results of the evaluations indicate the load cells comply with applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1997 Edition

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

Information Reviewed By: J. Williams (NIST) 97-061 & 97-061A1