

National Type Evaluation Program
Certificate of Conformance
for Weighing and Measuring Devices

For:

Load Cell
Single Ended Bending Beam
Model: PC1 Series*
 n_{max} : (Single Cell): 4500
Capacity: 7.5 kg to 75 kg (See Below)

Accuracy Class: III

Submitted by:

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Standard Features and Options

* The PC1 Series is identified by the model designation PC1-XXkg-M (or U), where the XX represents the capacity and the M suffix represents a metric thread (U represents a unified thread)

Capacity (kg)	v_{min} (g)	Minimum Dead Load (kg)
7.5	0.25	0
10	0.30	0
15	0.50	0
30	1.0	0
50	1.7	0
75	2.5	0

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: August 11, 1999

Gilbert M. Ugiansky, Ph.D.
Chief, Office of Weights and Measures
Issue Date: September 1, 1999

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Flintec, Inc.
Single Ended Bending Beam Load Cell
Model: PC1 Series

Application: The load cells may be used in Class III scales for single 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 must be on an accompanying document including the serial number of the load cell.

Test Conditions: One 30-kg capacity load cell was tested at the California NTEP laboratory using dead weights as the reference standard. The data were analyzed for single load cell applications. The cell was tested over a temperature range of -10 °C to 40 °C. Three tests were run on the 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, 1999 Edition

Tested By: Gary Castro (CA)