



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance
for Weighing and Measuring Devices

For:

Load Cell
Column
Model: HI-RCH03-XX Series
 n_{max} : Single Cell: 10 000
Capacity: 50 klb - 200 klb

Accuracy Class: III L

***Submitted By: Contact Info. Updated December 2018**

Hardy Instruments, Inc.
9440 Carroll Park Drive, Suite 150
San Diego, CA 92121
Tel: 858-255-6801
Fax: 858-675-1241
Contact: Debra Lawson
Email: debra.lawson@hardysolutions.com
Web site: www.hardysolutions.com

Standard Features and Options


The specific models and capacities covered by this certificate are listed below:

Model	Capacity (klb)	v_{min}	Minimum Dead Load (lb)
HI-RCH03-1K	50	1.5	0
HI-RCH03-5K	100	3.0	0
HI-RCH03-10K	200	6.0	0

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 "NIST 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.


Brett Gurney
Chairman, NCWM, Inc.


James Cassidy
Committee Chair, NTEP Committee
Issued: August 3, 1999

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

The National Conference on Weights and Measures (NCWM) does not approve, recommend or endorse any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.



Hardy Instruments, Inc.
Column Load Cell / HI-RCH03-XX Series

Application: The load cells may be used in Class III L 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, v_{\min} , capacity, accuracy class, and serial number are 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 is issued based on the following tests and upon information provided by the manufacturer. One 250-kN capacity load cell [1kN (one thousand Newtons) is equal to 224.81 lb (pound force)] was tested at NIST using dead weights as the reference standard. The data were analyzed for single load cell applications. The load cell was tested over a temperature range of -10 °C to 40 °C. The excitation voltage was 10.0 VDC. 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. The v_{\min} values are based on $3d/5$ °C.

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

Type Evaluation Criteria Used: NIST Handbook 44, 1999 Edition

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

Information Reviewed By: L. T. Sebring (NIST)