## **National Conference on Weights and Measures**

15245 Shady Grove Road, Suite 130 • Rockville, MD 20850

Certificate Number: 05-111

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

For:

Indicating Element Digital Electronic Model: HI-3030 n<sub>max</sub>: 10 000

Accuracy Class: III/III L

Submitted by:

Hardy Instruments, Inc. 3860 Calle Fortunada San Diego, CA 92123-1825

Tel: (858) 278-2900 Fax: (858) 278-9700 Contact: Michael Strauch

e-mail: mstrauch@hardyinst.com

### **Standard Features and Options**

Pound/kilogram unit conversion
Liquid crystal display
Alphanumeric display
Gross/tare/net weight display
Gross/net weight display
Keyboard tare
Semi-automatic (push-button) tare
Semi-automatic (push-button) zero
Automatic zero setting mechanism (AZSM)
AC power supply
Ethernet communication port
Category 3 audit trail

#### **Options**:

Remote calibration Configuration capability

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.

Don Onwiler

Chairman, NCWM, Inc.

James C. TRUEX

James C. Truex

Chairman, National Type Evaluation Program Committee

Issued Date: November 30, 2005

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#### Hardy Instruments, Inc Indicating Element Model: HI-3030

**Application:** General purpose indicator for Class III and Class III L installations.

**Identification:** The identification is on a self-adhesive and self-destructive badge at the bottom of the indicator.

<u>Sealing:</u> Sealing is by Category 3 audit trail only. The configuration and calibration parameters are password protected and can be accessed within the device itself. Sealing is initiated by pressing the "Test or (9)" key and "Enter" key. A "Device Data List" will then be displayed. Press the "Down" arrow key until "View Audit Trail" is displayed. Press "Enter", the audit trail information is displayed by name, value, and dates in designated audit trail lines. Press "Exit" to leave the audit trail mode.

**Operation:** The indicator may support up to four weighing elements independently and simultaneously. Each port can be independently calibrated, configured, and sealed for weighing operations.

<u>Test Conditions</u>: The Model HI-3030 electronic indicator was submitted for evaluation. The emphasis of the evaluation was on device design, operation, performance, and compliance with influence factor requirements. The indicator was interfaced with a weight simulator and tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Tests were also conducted over a voltage range of 100 VAC to 130 VAC. Additionally, the indicator was interfaced with a weighing element to verify compliance with motion detection, momentary power loss, and zero function requirements.

Type Evaluation Criteria Used: NIST Handbook 44, 2005 Edition, NCWM Publication 14, 2005 Edition

**Tested By:** S. Boyd (CA)

**Conclusion**: The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

**Information Reviewed By:** S. Patoray, L. Bernetich (NCWM)

