

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For:

Hanging Scale
Digital Electronic
Model: HSDC Series
n_{max}: (see below)
e_{min}: (see below)
Capacity: (see below)
Accuracy Class: III

*Submitted By: Contact Info. Updated: October 2010

Cardinal Scale Manufacturing Co.

203 East Daugherty Webb City, MO 64870 Tel: 417-673-4631 Fax: 417-673-5001

Contact: Stephen Langford
Email: slangford@cardet.com
Web site: www.cardinalscale.com

Standard Features and Options

Standard Features:

- Automatic (AZSM) Zero Setting Mechanism
- Low Battery Indication
- Semi-automatic (push-button) Zero Setting Mechanism
- Battery Operated
- Semi-automatic (push-button) Tare
- Sleep Mode
- Gross/Net Display
- Automatic Shut-off
- Load Cell is non-NTEP

Model Nessehon	Camaaita			Lood Call
Model Number	Capacity	$\mathbf{e}_{\mathbf{min}}$	n _{max}	Load Cell
HSDC-10KG	9.995 kg	0.005 kg	1999	Cardinal CMBC-20
HSDC-20	20 lb	0.01 lb	2000	Cardinal CMBC-20
HSDC-20KG	20kg	0.01 kg	2000	Cardinal CMBC-50
HSDC-40	40lb	0.02 lb	2000	Cardinal CMBC-50
HSDC-40KG	40kg	0.02 kg	2000	Cardinal CMBC-200
HSDC-100	99.95 lb	0.05 lb	1999	Cardinal CMBC-200
HSDC-100KG	99.95 kg	0.05 kg	1999	Cardinal CMBC-200
HSDC-200	200 lb	0.1 lb	2000	Cardinal CMBC-200

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. *Editorial changes, not affecting the type or metrological content, corrected this certificate.

Tim Tyson Chairman, NCWM, Inc. Randy Jennings

Chairman, National Type Evaluation Program Committee

Issued: October 21, 2010

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

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Cardinal Scale Manufacturing Co.

Hanging Scale / HSDC Series

Application: General purpose weighing.

<u>Identification</u>: The self-destructive identification label is located on the top of the scale.

<u>Sealing</u>: The scale is sealed with a wire security seal threaded through two drilled head screws that secure the plate that covers the calibration switch.

<u>Test Conditions</u>: The Models HSDC-20 and HSDC-200 digital hanging scales were submitted for evaluation. The scales were tested for increasing and decreasing load, over a temperature range of -10 °C to 40 °C (14 °F to 104 °F) and over a voltage range of 6.3 to 9.0 VDC. Additionally, a load of approximately one-half capacity was applied to the each scale over 100,000 times. The scale was tested periodically during this time.

Evaluated By: A. McCoy (OH)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2003. NCWM, Publication 14: Weighing Devices, 2003.

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

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

