



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For: Automatic Bulk Weighing System Controller Model: 8XYCBW Series n_{\max} : 10 000 Accuracy Class: III / III L	*Submitted By: Contact Info. Updated November 2019 Cardinal Scale Manufacturing Company 102 East Daugherty Street Webb City, MO 64870 Tel: 417-673-4631 x 211 Fax: 417-673-5001 Contact: Eric Golden Email: egolden@cardet.com Web site: www.cardet.com
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Standard Features and Options

Standard Features:

- Alphanumeric Dot Matrix Display
- Programmed Commodity Names
- Time and Date
- 800 Series Indicator Model (denoted by "XY" in the model number)
- "XY" = 25 for Model 825CBW
- Graphics Display
- When used as part of a bulk weighing system for grain, it must meet Class III tolerances.
- When used as part of a bulk weighing system for commodities other than grain, it must meet the appropriate Class III or Class III L tolerances.

Optional Features:

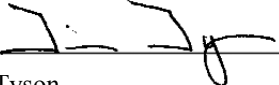
- S in model designates NEMA 4 Enclosure


System Components:

- Cardinal 800 Series weight-indicating instrument (NTEP Certificate of Conformance Number 08-046) with bulk weighing software
- Cardinal Model P500 tape printer, or other compatible printer

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.


Tim Tyson
Chairman, NCWM, Inc.


Randy Jennings
Chairman, National Type Evaluation Program Committee
Issued: December 6, 2010

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**Cardinal Scale Manufacturing Co.**

Automatic Bulk Weighing System / 8XYCBW Series

Application: The system controller may be used in any bulk weighing scale system. When used as part of a system to weigh grain, it must be marked as a Class III device. When used in a bulk weighing system for any commodity other than grain, it must be marked as Class III or Class IIIL, whichever is appropriate.

Identification: The identification badge is located on the rear of the weight-indicating instrument enclosure and may be viewed by tilting the indicator forward. The identification badge is located on the side of the NEMA 4X enclosure (identified by the letter "S" in the model number.)

Sealing: A Category 1 physical seal or a Category 1 audit trail utilizing two event counters, may be used to seal the indicator. Selection of the sealing method is made by placing the "CAL" switch (located inside the device on the main circuit board) in the desired position.

CAL Switch Position	Sealing Method	Calibration Enabled?
DOWN	Event Counters	YES
UP	Lead-Wire Seal	NO

With the CAL switch in the UP position, the physical security seal must be used. The physical seal is located on the rear panel of the indicator and the wire may be threaded through two drilled-head screws securing the rear panel. Note that with the CAL switch in the UP position and the lead-wire security seal installed, attempting to access the setup and calibration mode will display the message "HARDWARE CALIBRATION DISABLED" and calibration will not be permitted.

To use the event counter security seal, place the CAL switch in the DOWN position. To view the event counters, turn the instrument on. After the self-test and startup screen is displayed, press the front panel Navigation down arrow key to the LEGAL METROLOGY INFORMATION / SETUP option. Then press the ENTER key to enter the LEGAL METROLOGY INFORMATION / SETUP menu screen. Pressing the "1" key or using the navigation keys, highlight the "VIEW EVENT COUNTERS" and press the ENTER key. The display will now show the contents of the event counters. To print the information, press the "P" key. Press any other key to return to the Setup Menu.

Test Conditions: This Certificate of Conformance is issued to allow use of an 800 series weight indicator traceable to NTEP Certificate of Conformance Number 08-046. A Model 825CBW was submitted for a laboratory evaluation. The emphasis of the evaluation was on device design, operation, display, and interaction with the weighing device. The device was interfaced with a scale simulator then evaluated for proper operation. The Model 825 indicator is metrologically equivalent to the Model 700 series indicator, which was evaluated in the laboratory and in the field under actual operating conditions, no field evaluation was deemed necessary.

Evaluated By: Dan Parks (CA) and Gary Castro (CA)

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2010. NCWM, Publication 14: Weighing Devices, 2010.

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

Information Reviewed By: J. Truex (NCWM)



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Automatic Bulk Weighing System / 8XYCBW Series

Example of Device:



Model 8XYCBW Series

