

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

For:

Indicating Element
Digital Electronic
Model: CW90-Y and CW90X-Y * (See Below)
 n_{\max} : 10 000

Accuracy Class: III / IIIL

Submitted by:

Rice Lake Weighing Systems
230 W. Coleman St.
Rice Lake, WI 54868
Tel: (715) 234-9171
Fax: (715) 234-6967
Contact: Paul A. Lewis
Email: plewis@ricelake.com

Standard Features and Options

Model: CW90-Y and CW90X-Y

Semi-automatic (push button) zero setting mechanism (SAZSM)

Automatic zero tracking mechanism (AZT)

Alphanumeric Display

Keyboard tare

Semi-automatic (push button) tare

Wireless Ethernet Communication

AC power supply * (See Below)

DC power supply * (See Below)

Remote printer capability

Gross/Net display

14 segment LED display

RS232 / USB / Ethernet

4-20mA Loop

Unit Conversion (lb, oz, kg, g)

Linear Calibration Points

Category II Audit Trail

* The model suffix Y designates the following:

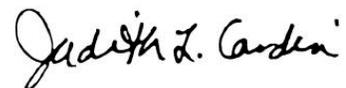
Y= Power Input Voltage; A= 100-240 VAC, D= 9 – 36 VDC, E= 10 – 60 VDC

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.



Jack Kane
Chairman, NCWM, Inc.



Judith L. Cardin
Chairman, National Type Evaluation Program Committee
Issue Date: April 9, 2009

Note: The National Conference on Weights and Measures 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.

Rice Lake Weighing Systems
Indicating Element
Model: CW90-Y and CW90X-Y

Application: A general purpose indicating element to be interfaced with an approved compatible weighing element.

Identification: The capacity by division statement and, where applicable, the CLC or Section Capacity will appear on an adhesive label on the front bezel plate of the indicator. The other required information appears on an adhesive label on the side of the indicator.

Sealing: Physical Seal: The Model CW90-Y and CW90X-Y wire security seal can be threaded through two drilled head screws that secure the back cover of the indicator to prevent undetected access to a switch that must be depressed to enter the set-up and calibration mode, on the bottom side of the indicator.

Audit Trail “Category II”: To access audit trail Press MENU Key “AUDIT” will be displayed. Pressing the UNDER key will display the legal for trade software version. Pressing the TARGET Key will display the word “CALIB” for the Calibration counter and three seconds later the Calibration counter number will be displayed. “CALIB” and the Calibration counter number will continue to flash back and forth until the TARGET Key is pressed again. Pressing the TARGET Key again will display “CFG” for the Configuration counter and three seconds later the Configuration counter number will be displayed. “CFG” and the Configuration counter number will continue to flash back and forth until the TARGET Key is pressed again. Pressing the TARGET Key again will display “EXIT” then pressing the UNDER key will put the indicator back into the weight mode. Pressing the MENU Key at anytime while in Audit Trail will put you back into the weight mode. Accessing Audit Trail will not interfere with any weighting function except the weight will not be displayed until you go back in to the weight mode.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 89-092A1 and was issued without additional testing to correct an omission of the Audit trail method of sealing. Test conditions are repeated below.

Certificate of Conformance Number 89-092A1: This Certificate supersedes Certificate of Conformance Number 89-092 and was issued without additional testing to correct an omission of a standard feature in the “Standard Features & Options Box.”

Certificate of Conformance Number 89-092: The emphasis of the evaluation was on design, operation, performance, marking and compliance with influence factor requirements. A model CW90-A and CW90X-A indicator were evaluated. The indicators were interfaced to a Rice Lake Model BM1218-50 Weighing/Load Receiving Element (Certificate of Conformance of Conformance Number 95-072) and a printer to evaluate center of zero, discrimination, zone of uncertainty, motion detection, and print format. The indicators were also both interfaced to a load cell simulator which was used to perform several increasing/decreasing load tests. The CW90-A indicator was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Additionally, tests were conducted using power supplies of 85 to 264 VAC, 9 to 39.6 VDC, and 10 to 66 VDC.

Evaluated By: T. Lucas (OH), J. Morrison (OH)

Type Evaluation Criteria Used: NIST Handbook 44, 2008 Edition; NCWM Publication 14, Edition 2008

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) 08-092, 08-092A1 & 08-092A2

**Rice Lake Weighing Systems
Indicating Element
Model: CW90-Y and CW90X-Y**

Example of Device:

Example of Model CW90-Y:



Example of Model CW90X-Y:



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

For:

Bench Scale Weighing/Load Receiving Element
Load Cell Electronic
Models: BMXXXX-YYY* Series and RL2100
 n_{\max} : 5000
 e_{\min} : 0.001 lb (0.0005 kg) See Below
Capacity: 5 lb (2.5 kg) to 1000 lb (500 kg) See Below
Platform: See Below
Accuracy Class: III

Submitted by:

Rice Lake Weighing Systems
230 West Coleman Street
Rice Lake, WI 54868
Tel: (715) 234-9171
Fax: (715) 234-6967
Contact: Deb Harings-Lehman

Standard Features and Options

*The specific model designation for the BM Series covered by this certificate is BMXXXX-YYY where XXXX represents the scale dimensions in inches and the YYY represents the scale capacity in pounds. An "S" following the platform size designates stainless steel frame.

Capacity: BM Series: 5 lb x 0.001 lb to 1000 lb x 0.2 lb (2.5 kg x 0.0005 kg to 500 kg x 0.1 kg)
RL2100: 5 lb x 0.001 lb to 100 lb x 0.02 lb (2.5 kg x 0.0005 kg to 50 kg x 0.01 kg)

Platform size: BM Series: 10" x 10" to 24" x 24"
RL2100: 10" x 10" to 12" x 12"

Frame: Mild or stainless steel
Platform material: Stainless steel

Load cell used: Rice Lake Model RL1040-N5 (Certificate of Conformance Number 95-074),
Rice Lake Model RL1250-N5 (Certificate of Conformance Number 95-075),
Rice Lake Model RL1380 (Certificate of Conformance Number 94-128),
Rice Lake Model RL1042 (Certificate of Conformance Number 97-138), or compatible and certified equivalent load cells.

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: December 28, 1999



Louis E. Straub
Chairman, NCWM, Inc.



G. Weston Diggs
Chairman, National Type Evaluation Program Committee
Issue date: April 5, 2000

Note: The National Conference on Weights and Measures 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.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

**Rice Lake Weighing Systems
Bench Scale Weighing/Load Receiving Element
Models: BMXXXX-YYY Series and RL2100**

Application: For use in general purpose weighing when interfaced with a compatible and certified electronic indicating element.

Identification: The required information is on an approved label located on the base of the weighing element.

Sealing: There are no sealable parameters located on the load receiving element. The scale calibration and set-up parameters are sealed through the indicating element.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 95-072A1 and is issued to add a new model (RL2100) to the existing Certificate. The emphasis of the evaluation was on the device design, marking, performance and compliance with influence factor requirements. Two model RL2100 weighing elements, a 5 lb x 0.001 lb (2.5 kg x 0.0005 kg) and a 100 lb x 0.02 lb (50 kg x 0.01 kg), were evaluated in the laboratory. Several increasing/decreasing load and shift tests were performed. A load of approximately one-half capacity was applied to the scales over 100 000 times. The devices were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Previous test conditions are repeated below for reference.

Certificate of Conformance Number 95-072A1: This Certificate superseded Certificate of Conformance Number 95-072 and was issued to amend the original test conditions to include an additional capacity of the scale family that was submitted and tested but not included.

Certificate of Conformance Number 95-072: The emphasis of the evaluation was on the device design, marking, performance and compliance with influence factor requirements. Two weighing elements, a 5 lb x 0.001 lb (2.5 kg x 0.0005 kg) and a 1000 lb x 0.2 (500 kg x 0.1 kg), were evaluated in the laboratory. Several increasing/decreasing load and shift tests were performed. A load of approximately one-half capacity was applied to the scales over 107 280 times. The devices were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F).

The results of the evaluations indicate the scales comply with applicable requirements of NIST handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 2000 Edition

Tested By: W. West & A. McCoy (OH) 95-072; A. McCoy (OH) 95-072A1; A. McCoy & E. Matthews (OH) 95-072A2