

## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For:

Automatic Weighing System

Electronic load cell based dynamic weighing system

Model: MW-WWxLL-X \*(see below) Capacity: 10 to 200 lb (5 to 100 kg) e min: 0.005 to 0.1 lb (0.005 to 0.05 kg)

 $n_{max}$ : 2000

Platform: Conveyor sizes \*(see below)

Accuracy Class: III

**Submitted By:** 

Rice Lake Weighing Systems

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### **Standard Features and Options**

Model number description: In the example: MW-36x48-E

MW = conveyor scale, 36 = width in inches, 48 = length in inches

E or M = English version or Metric version (English version represents inches, Metric version represents centimeters)

#### MAXIMUM CONVEYOR PLATFORM SIZE

Platform Width 6 to 36 inches (15 to 92 centimeters)
Platform Length 12 to 60 inches (30 to 150 centimeters)

Minimum Data Acquisition: Time 0.108 seconds

Belt speeds: between 0 - 380 ft/min

#### **Typical System Components:**

Conveyor scale base attached to one of several NTEP approved indicators that have been verified to perform with the conveyor scale

base (see list on page 2), Optional: computer device Optional: label printer Optional: label applicator

Optional: infeed conveyors, outfeed conveyors, product divert mechanism, product spacing mechanism, and vacuum product plastic

sealer.

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 *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.

Ivan Hankins

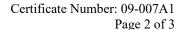
Chairman, NCWM, Inc.

Hal Funce

Hal Prince Chair, NTEP Committee Issued: October 4, 2021

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# Rice Lake Weighing Systems

Automatic Weighing System / MW-WWxLL-X

**Application:** For use in dynamic check weighing and weigh labeling applications

#### Weight Indicators Tested Dynamically:

- Rice Lake IQ-810 (IQ+800series) CC 92-013A3 with software E06591 010202 or higher
- Rice Lake 920i CC 01-088 version V1.01.02S8153 920i or higher
- Rice Lake 1280 (1280-XY) CC 15-001 with software program number "PN196230" version 1.02 or higher

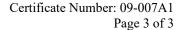
Identification: The Identification badges are located on the side of the conveyor scale base. Weight indicator identification badges are located in the traditional locations specific to that indicator. For the optional computer software for use in weigh label and weigh price label applications, a version number is found on both the startup screen and the upper left corner of the normal operation screen. The version must be "Box Labeler 5.4.6" as tested or higher. The computer equipment that runs the "Box Labeler 5.4.6 or higher" software must have a minimum of at least a 32-bit X86-based microprocessor, Intel Pentium, or supported RISC-based microprocessor, VGA or high-resolution display, one or more hard disks, with 117 MB minimum free disk space, method of program loading, and 12-MB RAM.

<u>Sealing</u>: The conveyor scale base consists of a single load cell with a structure supporting a conveyor belt and associated conveyor drive mechanism. All sealing is accomplished through the indicating element according to the manufacturer's instructions for the particular indicator used and may be either a physical seal or audit trail.

<u>Test Conditions</u>: This Certificate supersedes and replaces Certificate of Conformance Number 09-007 and is issued to add the Rice Lake Weighing Systems indicating element model 1280 (NTEP Certificate of Conformance Number 15-001) to the list of Weigh Indicators, listed on page 2 of this Certificate of Conformance, that have been certified to operate on the Automatic Weighing System. A model MW-06x12-E, 10 x 0.005 lb, with a belt speed of 75 f/m was tested in both static and dynamic mode using test weights a set of four test objects ranging in weight from 0.425 lb to 9.859 lb. All test results were within the applied tolerance values. No additional testing was deemed necessary. Previous test conditions are shown below.

Certificate of Conformance Number 09-007: This Certificate is issued based upon the following tests and upon information provided by the manufacturer. A 48inch long by 36-inch-wide conveyor scale was submitted for the purpose of this evaluation to cover the range of sizes as this size represents the shortest conveyor length that is capable of running the fastest conveyor speeds allowing for the minimum data acquisition time between photo eye triggers and the maximum width available. The capacities evaluated were 100 x 0.1 lb, 150 x 0.1 lb, and 200 x 0.1 lb. Environmental testing was performed using the indicating element and applying 0.7 tolerances to allow use of any NTEP approved weight indicator. Several static increasing/decreasing load and shift tests were conducted in the laboratory. The scale was then set up in the environmental chamber and static tests were conducted over a Temperature Range of -10 °C to 40 °C (14 °F to 104 °F). The device was then tested in the field under dynamic operating conditions with a variety of weight indicators, belt speeds, and capacities to determine compliance. Four test loads were run sixty times each for every indicator tested. Permanence testing was completed by continuously circulating four test pucks weighing more than 164 lbs for 100 hrs. at 288 ft/min belt speeds followed by a follow up dynamic test using four test loads each run sixty times.

A Model MW-06x12-E, 10 lb x 0.005 lb Automatic Weighing System was submitted for the purpose of this evaluation to cover the lowest capacity of the family and smallest minimum data acquisition time for the shortest scale length. Environmental testing was performed using the Rice Lake model 920i indicating element, with the indicating element outside the environmental Chamber, applying .7 tolerances to allow use of any NTEP approved and compatible weight indicator. Several static increasing/decreasing load and shift tests and dynamic tests using test pucks were conducted in the laboratory. The scales were then set up in the environmental chamber and static tests and dynamic tests were conducted over a Temperature Range of -10 °C to 40 °C (14 °F to 104 °F). Four test loads were run sixty times for each of the dynamic tests. Minimum data acquisition time was calculated to be .108 seconds for the 10 lb capacity scale with a belt length of 12 inches. The minimum data acquisition time was calculated earlier and found to range up to 0.130 seconds for the larger scales. Permanence testing was completed by continuously circulating multiple test pucks weighing more than 75% of capacity for the 10 lb capacity scale for 100 hrs. followed by repeating the dynamic tests using four test loads each run sixty times and repeating the static tests.







## Rice Lake Weighing Systems

Automatic Weighing System / MW-WWxLL-X

Evaluated By: A. Oman (IA), M. Norris (IA), W. West (OH), T. Lucas (OH) 09-007; M. Manheim (NCWM) 09-007A1

<u>Type Evaluation Criteria Used</u>: Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2004 Edition. NCWM Publication 14: Weighing Devices, 2004 Edition.

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

Information Reviewed By: J. Truex (NCWM) 09-007; D. Flocken (NCWM) 09-007A1

# **Example(s) of Device:**





