National Conference on Weights and Measures

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Certificate Number: 03-059A1 Page 1 of 2

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

For:

Indicating Element Digital Electronic Model: 120, 120 Plus, 120M Plus n_{max}: 10 000

Accuracy Class: III/III L

Submitted by:

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

Standard Features and Options

Semi-automatic zero setting mechanism (SAZSM) Automatic zero tracking (AZT) Semi-automatic (push-button) tare Initial zero setting mechanism (IZSM) (120 Plus; 120M Plus) RS 232 connector Battery power (120 Plus; 120M Plus) Battery saving feature (120 Plus; 120M Plus) LED display (120) Multiple tare memories (120 Plus; 120M Plus) Body Mass Index (Not Evaluated) (120M Plus)

Remote printer capability Gross/net display (120; 120 Plus) Unit switching capability (lb/kg or oz/g) AC/DC adapter Keyboard tare (120 Plus; 120M Plus) LCD display (120 Plus; 120M Plus) 4-20 mA Loop (120 Plus; 120M Plus)

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.

material by the NCWM.

Jadith J. Carden

Judith L. Cardin Chair, National Type Evaluation Program Committee Issue date: August 15, 2008 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

Rice Lake Weighing Systems Indicating Element Model: 120, 120 Plus, 120M Plus

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

Identification: The capacity by division statement and, where applicable, the CLC will appear on an adhesive label adjacent to the weight display. The other required information appears on an adhesive label that displays "VOID" when removed on the side of the indicator.

<u>Sealing:</u> A cover, on the left side of the bottom of the indicator held in place by a drilled head screw, covers and prevents undetected access to the calibration switch that must be depressed to enter the set-up and calibration mode. Once the indicator has entered the set-up or calibration, the device has to be turned off to get back to the weighing mode. A wire security seal can be threaded through a screw head and another drilled head screw that secures the cover of the indicator.

Test Conditions: This Certificate supersedes Certificate of Conformance Number 03-059 and is issued to add the models 120 Plus and 120M Plus and evaluate new features such as battery power, IZSM, multiple tare memories, keyboard tare, and LCD display. The Model 120 Plus was interfaced with a load cell simulator and the Model 120M Plus was interfaced with a Rice Lake weighing element Model BM1218-100 (Certificate of Conformance 95-072A2). An Epson printer model M119D was interfaced to both the 120 Plus and 120M Plus to verify printing requirements. Several increasing/decreasing load, discrimination, and checklist item tests were conducted. Additionally, tests were conducted using power supplies of 85 VAC and 264 VAC as well as at 3 VDC and 5 VDC. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 03-059</u>: The emphasis of the evaluation was on the device design, marking requirements, operation, and compliance with influence factor requirements. The Model 120 was interfaced with a load cell simulator and tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). The indicator was interfaced with a Rice Lake weighing element Model BM1818-50 (Certificate of Conformance 95-075A1) and an Epson printer model M119D to verify compliance with zero, zone of uncertainty, motion detection and printing requirements. Additionally, tests were conducted using power supplies of 100 VAC and 130 VAC.

Evaluated By: A. McCoy (OH) 03-059; J. Morrison (OH) 03-059A1

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

<u>Conclusion</u>: The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

Information Reviewed By: S. Patoray (NCWM), L. Bernetich (NCWM) 03-059, 03-059A1

Example of 120:

Example of 120 Plus:

Example of 120M Plus:

