National Conference on Weights and Measures

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Certificate Number: 02-090A1 Page 1 of 2

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

For:

Indicating Element & Automatic Bulk Weighing System Controller Digital electronic Model: DWC-400-XY* (See Below) n_{max}: 10 000 d

Accuracy Class III/IIIL

Submitted by:

CompuWeigh Corporation 150 Commerce Court Cheshire, CT 06410 Tel: (203) 699-9000 Fax: (203) 699-9488 Contact: Hal Ecke Email: hal@compuweigh.com Website: www.compuweigh.com

Standard Features and Options

- *The model suffixes XY designate the following:
- X = Enclosure type; 1 = Desk top, 2 = Upright, 3 = Wall mount, 4 = Panel mount
- Y = power input; A= 115 volts AC, B = 230 volts AC

Semi-automatic (push button) aero (SAZSM) Automatic zero setting mechanism (AZSM) Initial zero setting (only during calibration) Keyboard Tare Semi-automatic (push button) tare Programmable tare Multiple tare memories Remote printer capability LCD Display In/Out vehicle weighing Configurable set points Configurable Secondary & Tertiary weights Operator prompted& Graphical Display User programmable for non metrological functions Separate Gross/Tare/Net Display Gross/Net Display Alphanumeric Display lb/kg/g/oz/ton/metric ton unit's capability RS 232 communication port RS 485 communication port 20 mA Loop connector Linearity Calibration points Variable print format PC Keyboard Password protection Database memory ROC Display Configurable soft Keys

Includes program for Automatic Bulk Weighing System

Multideck (Multichannel) Capability (up to 4 channels including summing of selected or all channels

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.

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Don Onwiler Chairman, NCWM, Inc.

C. Truex

James C. Truex Chairman, National Type Evaluation Program Committee Issued Date: November 1, 2005

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.

CompuWeigh Corporation Model: DWC-400 Indicating Element

Application: A general-purpose indicator to be interfaced with an approved compatible weighing element(s). The device was also evaluated for use as the controller for an automatic bulk weighing system for grain. The CompuWeigh Corporation application software is contained in the DWC-400 and allows the device to operate as a stand-alone system. The DWC-400 performs all metrological functions.

Identification: The capacity by division statement and, where applicable, the CLC will appear on an adhesive label on the front of the indicator. The other required information appears on an adhesive label on the side of the indicator (except for the panel mount version. The label requirements will be placed adjacent to the to the weight display on the housing that surrounds the indicator).

<u>Sealing:</u> The DWC-400 indicator model version; "upright, desk top and wall mount utilize a wire security seal threaded thru any two of the drilled-head screws that hold a metal access plate located on the bottom of the indicator and a third larger drilled-head screw that blocks the calibration switch located in the lower right corner on the back of the indicator.

The panel mount version: also utilizes a wire security seal that passes through a drilled-head screw that holds the metal casing that surrounds the internal parts of the indicator and a larger drilled-head screw that blocks the calibration switch located in the lower right corner on the back of the indicator.

Operation: The system accepts gross weight information from the indicating element, the information for the target weight of a transaction, the draft size and automatically controls the weighing process. The gross, tare and net weight of each draft are recorded along with the net of each draft and total weight of all drafts. The graphics on the CRT screen illustrate and reflect the weighing process. The scale has a separate test mode. The system includes the ability to interface to the CompuWeigh GMS system, PLC, or other Human Machine Interface application, for the purpose of initiating orders, allowing remote starting and stopping of the weighing process, collecting data from the DWC-400, and printing reports. The DWC-400 performs all of the actual weighing operations. The scale has a separate test mode.

<u>Test Conditions:</u> This Certificate supersedes Certificate of Conformance 02-090 and is issued to include the CompuWeigh DWC-400 with automatic bulk weighing software. The evaluation consisted of a review for compliance with the Checklist for Automatic Bulk Weighing Systems; from Publication 14. The DWC-400 was interfaced with CompuWeigh's portable grain elevator leg in order to simulate automatic bulk weighing cycles and build up test to verify the software operation.

<u>Certificate of Conformance Number 02-090:</u> This certificate is issued based upon the following tests and upon information provided by the manufacturer. A CompuWeigh DWC-400 indicator was submitted for evaluation. The emphasis of the evaluation was on the device design, marking requirements, operation and compliance with influence factor requirements. Several performance tests were conducted with the indicator (stainless steel housing) interfaced with a weighing element, 3 load cell simulators (multiple weighing elements) and a printer. The 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 100 VAC/130 VAC and 200 VAC to 250 VAC.

Type Evaluation Criteria Used: NIST Handbook 44, 2005 Edition, NCWM Publication 14, 2005 Edition

Tested By: T. Lucas (OH) 02-090; William E. Bates (GIPSA) 02-090A1

<u>Conclusion</u>: The results of the evaluations and information provided by the manufacturer indicate the device complies with applicable requirements of NIST Handbook 44.

Information Reviewed By: S. Patoray, L. Bernetich 02-090, 02-090A1