



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Register
Wholesale Meter, Lane Controller and Digital Electronic
Models: MultiLoad II, DIV-2, MultiLoad II EXPLOSION-
PROOF, MultiLoad II SMP and MultiLoad II EXL
(see page 2)
Marketing Name: MultiLoad II
Indicator Capacity: 999999 Units

Submitted By:

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Standard Features and Options

Standard Features:

- Controls up to 12 Loading Arms and 32 Flow Meters per Lane
- 16-Line Active Matrix TFT Color LCD
- Class 1, Division I and Class 1, Division II Enclosure Options
- Alphanumeric Keypad
- Open Interface Protocol
- 8-Component Sequential Blending, 5-Component Ratio or Side-Stream Blending, Hybrid Blending Schemes
- Category III Audit Trail
- Four-Point Linearization Per Component
- API Tables for Temperature and/or Pressure Correction

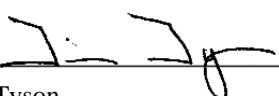
Model: MultiLoad II SMP

- Color Display
- Numeric Keypad
- Class 1, Division I


Options:

- Integral Proximity Card Reader
- Integral I/O board for single-arm operation

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: February 4, 2011

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Register / MultiLoad II, DIV-2, MultiLoad II EXPLOSION-PROOF, MultiLoad II SMP and MultiLoad II EXL

Model Designation: MultiLoad II DIV-2, MultiLoad II EXPLOSION-PROOF, MultiLoad II SMP, MultiLoad II EXL.

Legacy Model Designations: ML2-XXXXX, 4804, 4807, 4808, 4809; 4733, 4734, 4735, 4736, 4737, 4738, 4739, 4740, 4741, 4742, 4743, 4744, 4745, 4746, 4747, 4748, 4749, 4750, 4751, 4752, 4753, 4754, 4755, 4756, 4757, 4758, 4759, 4760, 4761, 4762, 4763, 4764, 4765, 4766, 4767, 4768, 4769, 4770, 4771, 4772.

Application: MultiLoad II product family devices provide flow control and indication for all of the liquid flow meters and load arms at a stationary, wholesale loading bay. MultiLoad II devices consist of a primary indicating/control device and as few as one or as many as 32 I/O boards, referred to as Flow Control Modules (FCM). A single FCM can be included in the enclosure of the indicating device.

Identification: The identification plate can be found on the lower right-hand side of the primary indicator. The Certificate of Conformance number is located on the plat.

Sealing: A Category III audit trail is available, eliminating the need for a physical seal on the device. The audit trail is referred to as the "W&M Change Log" in all MultiLoad II documentation. Passwords can be assigned to five individuals. An ID number, corresponding to a password, is logged to each event. An ID code of "C" in an event entry indicates that the change was made by remote communications. Physical sealing is still available in the form of a key switch, which prevents access to metrological parameters. The key switch has a cover, which can be physically sealed. Additionally, the faceplate of the indicating device can be sealed by using the wire holes on the side of the unit.

The audit trail can be viewed while the device is in an idle state. To view the audit trail, press the key sequence 4449 and then press the key marked NEXT. It is not possible to change or access any operational parameters while viewing the audit trail. Select the option "W&M Change Log". The most recent entry will be displayed on the top line of the screen. To see earlier entries, press the Next key to scroll through the earlier entries. To return to the most recent entry, press Exit and reselect the View option. To print the log, select Print. Instructions for viewing and interpreting the audit trail are in the MultiLoad II User Guide, chapter 10. When finished viewing the audit trail, return to the idle state by pressing the EXIT key until the MultiLoad II logo screen appears. This logo screen will display the firmware version.

Operation: A driver presents an identification card or driver number to the optional card reader. Using the keypad, the driver answers prompts generated by an external Terminal Automation System (TAS) or from internally generated data. After all prompts are answered satisfactorily, access is granted to the load screen. At the load screen, the driver is presented with a list of load arms to select. Each load arm at the lane is selected individually by highlighting the load arm and pressing ENTER. After selecting a load arm, prompts are issued for product selection and preset quantity. Upon entering the preset quantity, ENTER is pressed to start flow. Immediately after pressing ENTER to start, the driver will be returned to the load screen, where additional load arms can be selected. At the load screen, progress of all load arms can be viewed simultaneously.

Test Conditions: This Certificate supersedes Certificate of Conformance number 07-010A2 and was issued without additional testing to reactivate Certificate of Conformance Number 07-010A2 without lapse. Previous test conditions are listed below for reference.

Certificate of Conformance Number 07-010A2: This Certificate supersedes Certificate of Conformance number 07-010A1 and was issued without additional testing to clarify the model designations.

Certificate of Conformance Number 07-010A1: This Certificate supersedes Certificate of Conformance number 07-010 and was issued without additional testing to reactive Certificate of Conformance number 07-010 without lapse. Changes were also made to update the contact information.

Certificate of Conformance Number 07-010: Emphasis was placed on design, operation, programmable features, blend capabilities and performance with accessory equipment. All MultiLoad II models were tested with four point linearization. Field evaluations were conducted in an operating fuel terminal over a period of five weeks. Device was retested using the same criteria after 35 days and a through-put of 1.7 million gallons.

Evaluated By: J. Butler (NC), A. Katalinic (NC) and M. Dunn (NC) 07-010



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Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2011. NCWM, Publication 14: Measuring Devices, 2010.

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

Information Reviewed By: S. Patoray, L. Bernetich (NCWM) 07-010, 07-010A1; J. Truex (NCWM) 07-010A2, 07-010A3

Example of Device:

