

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

For:

Meter Indicating Mass
Digital Electronics
Model: OPTIMASS 7050C/F - XXT Series
Converter Electronics Model: MFC 050 Series

Accuracy Class: 0.3

Submitted by:

Krohne, Inc.
7 Dearborn Rd.
Peabody, MA 01960
Tel: (978) 535-6060
Fax: (978) 535-1720
Contact: Barclay Beahm

Standard Features and Options

Specific models, flow rates and system combinations covered by this certificate are listed below.
The two line LCD alphanumeric display is not intended as a primary display for mass and is for viewing process variables only.

Options: Remote transmitter
Insulation, electric or liquid heating and liquid cooling
Explosion proof housing

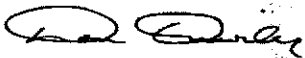
Specific Model Designations and Parameters:

Flow Meter Model Number OPTIMASS	Flow Meter Size - XX (inches)	Flow Rates (lb/min)	Minimum Measured Quantity (lb)
7050C - 40T	= 1.5	330 - 3750	1500
7050 C - 50T	= 2.0	660 - 7500	3000
7050 C - 80T	= 3.0	1320 - 15000	6000

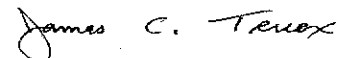
Model Configurations:

7050C - XXT Integral Converter
7050F - XXT Remote Sensor
MFC 050F Remote Converter

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.



Don Onwiler
Chairman, NCWM, Inc.



James C. Truex
Chairman, National Type Evaluation Program Committee

Issued Date: March 17, 2006

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.

Krohne, Inc.
Meter Indicating Mass
Model: OPTIMASS 7050C/F – XXT Series

Application: For use in stationary applications only. The device is configured for mass assigned to the pulse output and must be used with an approved and compatible indicator.

Products:

Product Groups	Typical Products	Specific Gravity
Normal Liquids	Water; Alcohols; Glycols; Water Mixes thereof; Agricultural Liquids, Fertilizers, Seeds, and Herbicides; Chemicals; Petroleum Products; Solvents; Suspensions	0.90 – 1.55

NOTE: Not all "typical products" listed in this table are covered by this Certificate. Only those products falling within the specific gravity listed in the last column are covered. Some products may have a specific gravity that falls into more than one product group. This Certificate covers only products, which fall into the product group and specific gravity, listed in the table above.

Identification: The information is displayed on the lower part of the converter housing where it connects to the sensor housing. When remotely connected, the information is displayed on the sensor and on the converter.

Sealing: PRIOR TO SEALING, verify the magnetic remote programming sensors have been removed. The sensors to be removed are located on the transmitter display faceplate, inside the glass cover. One is located on the top center of the display and the other is located on the lower left portion of the display to the left of the right arrow key. The third sensor located to the right of the up arrow key will remain. After verification of removal, the glass cover is sealed to the housing by threading a wire security seal through a drilled hole in the cover and another hole in a tab attached to the transmitter main body. The mass flow meter sensor has no adjustable components that require sealing.

Test Conditions: The Model 7050C – 50T was submitted for evaluation. The meter was tested gravimetrically while measuring water at the manufacturer's laboratory. The emphasis of the evaluation was on device design, operation, and performance. Four tests each at five different flow rates ranging from 660 lb/min up to 7500 lb/min were performed. The tolerance of 0.2% was applied as per the Mass Flow Meter Code for accuracy class 0.3 devices. The meter was sealed and tests repeated after more than 15 000 000 pounds of throughput. Additionally, the Model 7050K – T50 was installed in a field location and tested gravimetrically while measuring liquid fertilizer (11-37-0, specific gravity 1.45). The meter was interfaced to a Krohne, Inc. Model 58801480100 (NTEP CC 99-206) remote register/controller serving as the primary display. Three tests each at four different flow rates were conducted applying the tolerance as stated above. The meter was sealed and tests repeated after approximately 30 days and more than 15 000 000 pounds of throughput.

Type Evaluation Criteria Used: NIST Handbook 44, 2006 Edition, NCWM Publication 14, 2005 Edition

Tested By: Charlie Nelson (CA), R. Norman Ingram (CA)

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

Information Reviewed By: S. Patoray, L. Bernetich (NCWM)

Krohne, Inc.
Coriolis Mass Flow Meter
Model: OPTIMASS 7050C/F – XXT Series

