NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Meter Indicating Volume
Digital Electronic
Model: Industrial Turbo

Submitted By:
Badger Meter, Inc.
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Standard Features and Options

Meter Model	Meter Size (Inches)	Range of Flow Rates (GPM)	Meter Material
Industrial Turbo	2	8 to 200	Cast Iron
Industrial Turbo	3	10 To 450	Cast Iron
Industrial Turbo	4	25 to 1250	Cast Iron

- Cast Iron or Stainless Steel Housing
- Bronze or Stainless Steel Head
- Ryton Rotor and Nose Cone
- Ceramic Bearings
- Stainless Steel Straightening Vanes
- Buna N, EPR, or Viton O-ring and Tetraseal

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.

Marc Paquette
Chair, NCWM, Inc.

Gene Robertson
Chair, NTEP Committee
Issued: September 10, 2024

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Badger Meter, Inc.

Meter Indicating Volume / Industrial Turbo

Application: The Industrial turbo is used in concrete plants and other applications where batching occurs in the recipe and mixing process.

Identification: All required information is on the meter pulse output device on top of the meter body. Flow direction and size are cast into the meter body.

Sealing: The meter register will have provisions for a seal screw and wire for the attachment to the meter.

Operation: The Industrial Turbine meter is a volumetric liquid flow meter that works by a rotor turning at an angular velocity proportional to the fluid velocity through the turbine. Electronic pickups generate signals from the rotor magnet. These signals are translated to an open collector-transistor pulse output.

Test Conditions: A three-inch meter was tested at five flow rates, 450, 300, 150, 50, and 10 gallons per minute. All results were within tolerance and repeatability requirements. After the required throughput (max. flow rate times 2000) the tests were performed again, and all results were within requirements. A four-inch meter was tested at five flow rates 1250, 750, 350, 125, and 25 gallons per minute four tests each. All results were within tolerance and repeatability requirements. After the required throughput (max. flow rate times 2000) the tests were performed again, and all results were within requirements.

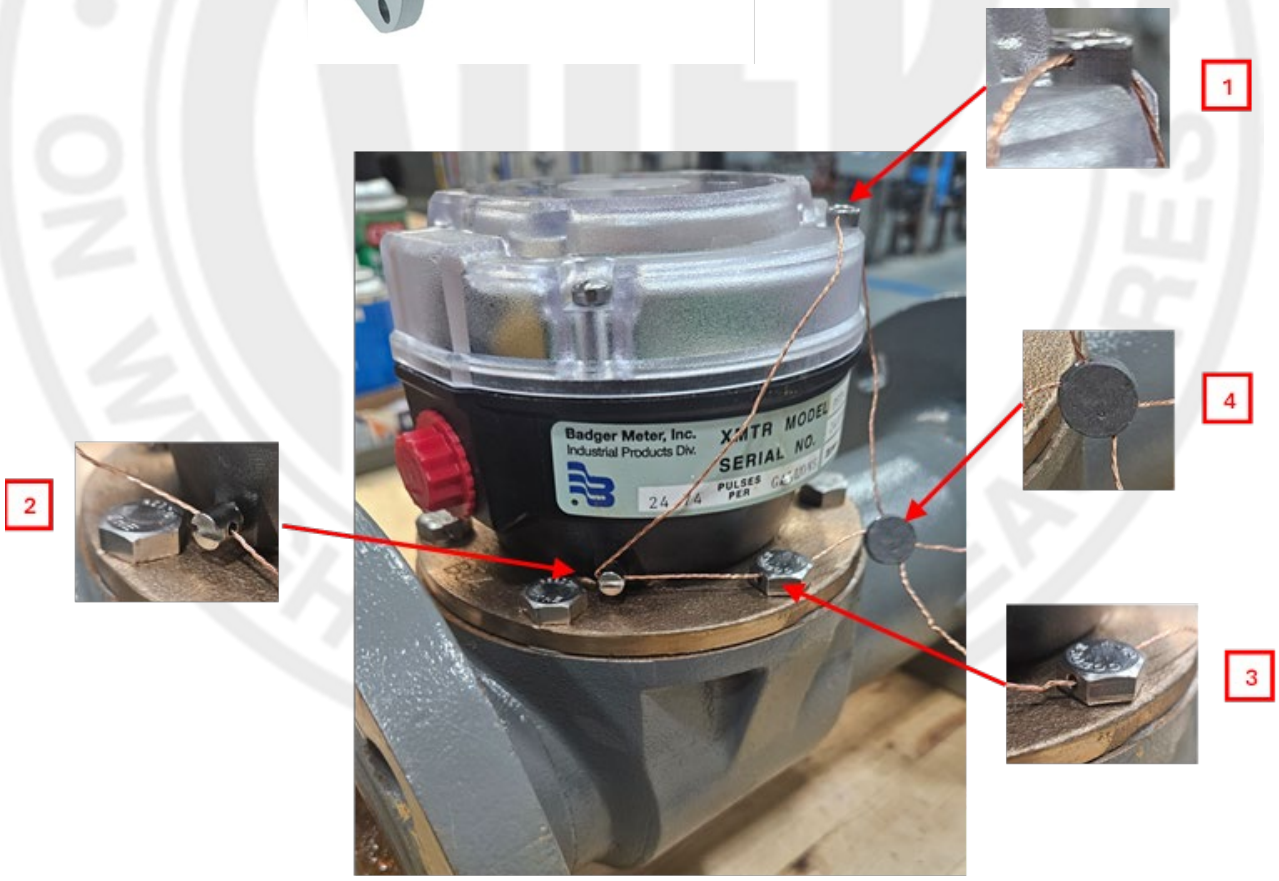
Evaluated By: A. Katalinic (NTEP) 24-092 (CN 11137)

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2024 Edition. *NCWM Publication 14: Measuring Devices*, 2024 Edition.

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

Information Reviewed By: D. Flocken (NCWM) 24-092

Badger Meter, Inc.
Meter Indicating Volume / Industrial Turbo

Example(s) of Device:

(1) Feed the security wire through the supplied seal screw in the transmitter cover.
(2) Feed the security wire through the seal screw on the side of the transmitter.
(3) Feed the security wire through the seal bolt on the meter head.
(4) Feed the two free ends of the security wire through the lead seal and crimp.