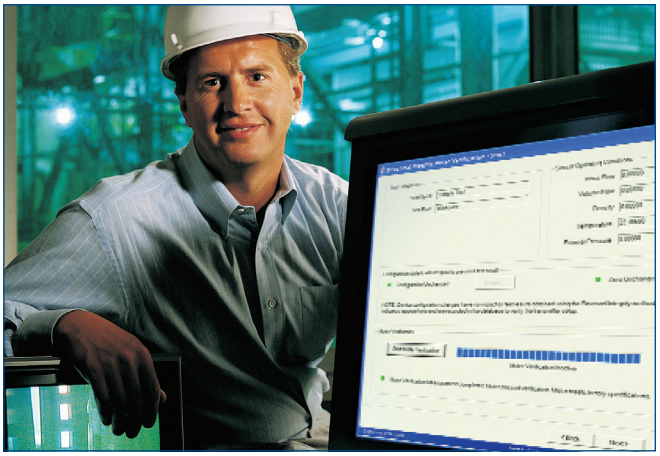
Smart Meter Verification SNAP-ON™ Application

- Verify performance and meter health from your control room.
- Use powerful device trending and reporting capabilities.
- Save time and money by leveraging predictive diagnostics.
- Meet safety requirements and log results of compliance testing onsite or remotely.
- Automatically run meter verification tests when it's convenient for you.



Gain real-time diagnostics to monitor your meter performance and health.

Overview

The AMS Device Manager Smart Meter Verification SNAP-ON application gives you the ability to verify and document the performance and overall health of your Micro Motion® Coriolis mass flowmeters from the comfort of your control room. With AMS Device Manager, the Smart Meter Verification SNAP-ON application delivers a powerful diagnostic tool for verifying, trending, and reporting meter health and performance. Engineers, technicians, and operations personnel can use the Smart Meter Verification SNAP-ON application to identify and avoid problems before the process is affected.

This SNAP-ON application communicates with Micro Motion ELITE series flowmeters using the HART® communication protocol over existing 4-20 mA signal cabling or the FOUNDATION fieldbus communication protocol. Important device information is presented in a consistent, easy-to-interpret interface that provides:

- Intuitive views of all connected meters.
- Online monitoring of device configuration, alerts, and process variable information.
- Instrument comparison and summary of verification history.
- Instrument set up and calibration information.
- Data import, export, and reporting options.

Trend results to identify issues prior to measurement impact.

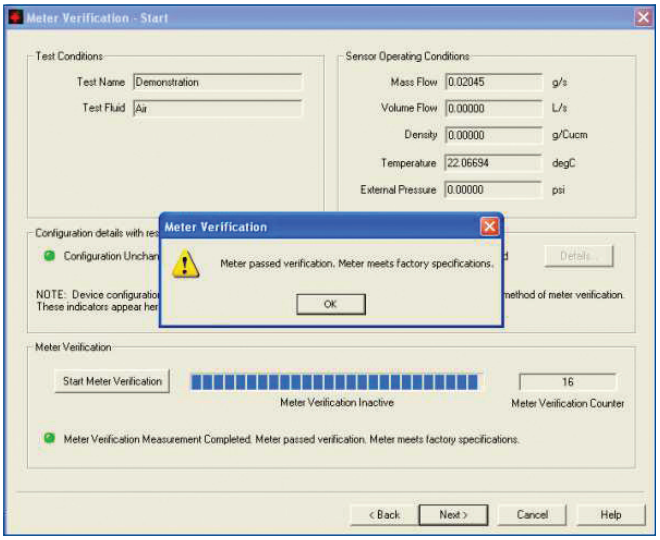
Meter Health Verification

The Smart Meter Verification SNAP-ON application monitors the health of your meters and provides full diagnostics for advanced troubleshooting. Using Emerson's next-generation multivariable digital (MVD™) signal processing, you can easily check complete meter health – from sensor through electronics – with a single keystroke.

Meter Performance Verification

Launch the Smart Meter Verification SNAP-ON application from AMS Device Manager at any time, with the flowmeter sensor measuring full or empty, flowing or not-flowing. This SNAP-ON application will check and capture device configuration and zero calibration level, as well as sensor structure, electronics, and signal processing for a complete verification of meter performance. You can also trend and report test results for complete test traceability and easy data management.

Real-time, on-demand assessment of the performance of Micro Motion Coriolis meters enables evaluation of the structural integrity of the meter whenever required. Combined with the reliability of Micro Motion Coriolis meters, the Smart Meter Verification SNAP-ON application allows you to maximize your return on investment by eliminating the costs and effort traditionally required to check meter performance.



Test for safety requirements and document results in the AMS Device Manager audit trail.

Set Up and Test Meters for Safety and SIS Applications

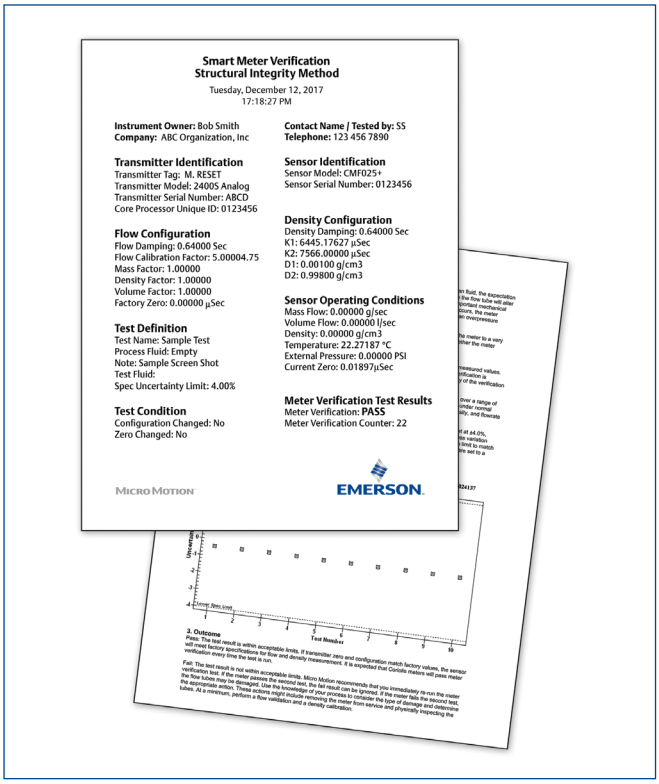
Many installations have rigorous safety and documentation requirements that demand frequent compliance testing of field instruments. Use the SNAP-ON application to set up and test meters for the integrity and performance needed to meet safety requirements. Initiate verification tests without shutting down your process. Store test results for future comparison and analysis. The AMS Device Manager audit trail logs test results with a time and date stamp for compliance requirements.

Schedule Performance Diagnostics and Meter Verification

Schedule meter verification testing to run on any recurring daily, weekly, or monthly schedule. Resulting alerts from the Smart Meter Verification SNAP-ON application will be visible in the AMS Device Manager audit trail and Alert Monitor.

Reports

Use the Smart Meter Verification SNAP-ON application to generate reports that include configuration, test conditions, and test trending results. These reports can be saved or printed, enabling traceability for quality or compliance assurance.



Smart Meter Verification
Structural Integrity Method

Tuesday, December 12, 2017
17:18:27 PM

Instrument Owner: Bob Smith
Company: ABC Organization, Inc

Contact Name / Tested by: SS
Telephone: 123 456 7890

Transmitter Identification
Transmitter Tag: M. RESET
Transmitter Model: 2400S Analog
Transmitter Serial Number: ABCD
Core Processor Unique ID: 0123456

Sensor Identification
Sensor Model: CMF025+
Sensor Serial Number: 0123456

Flow Configuration
Flow Damping: 0.64000 Sec
Flow Calibration Factor: 5.00004.75
Mass Factor: 1.00000
Density Factor: 1.00000
Volume Factor: 1.00000
Factory Zero: 0.00000 µSec

Density Configuration
Density Damping: 0.64000 Sec
K1: 6445.17627 µSec
K2: 7566.00000 µSec
D1: 0.00100 g/cm3
D2: 0.99800 g/cm3

Test Definition
Test Name: Sample Test
Process Fluid: Empty
Note: Sample Screen Shot
Test Fluid:
Spec Uncertainty Limit: 4.00%

Sensor Operating Conditions
Mass Flow: 0.00000 g/sec
Volume Flow: 0.00000 l/sec
Density: 0.00000 g/cm3
Temperature: 22.27187 °C
External Pressure: 0.00000 PSI
Current Zero: 0.01897µSec

Test Condition
Configuration Changed: No
Zero Changed: No

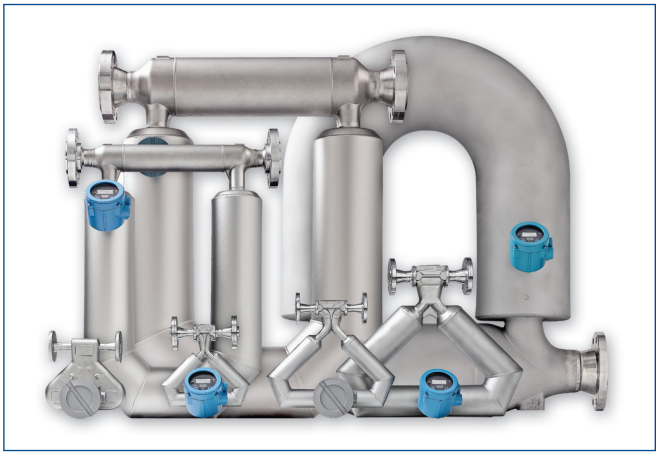
Meter Verification Test Results
Meter Verification: **PASS**
Meter Verification Counter: 22

MICRO MOTION EMERSON

Compatibility

The Smart Meter Verification SNAP-ON application is compatible with new Micro Motion ELITE series of Coriolis meters with 1000, 2000, 3000, or 5700 transmitters. Meters must have Meter Verification enabled to use this software tool. The Meter Smart Verification SNAP-ON application is supported with AMS Device Manager v9.0 and higher and also provides HART 7 support.

Please contact your Micro Motion sales representative for support.



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