Emerson Meter Verification and Diagnostics
In-situ meter verification for the complete flow loop
Quick, Easy, and Complete Meter Verification
— only from Emerson Process Management

Emerson’s in-line meter verification technology offers a complete assessment of meter performance, delivering results and confidence for your entire flow loop – and saves you thousands per year in operating costs.

Reduce Costs
• Dramatically reduce the cost of calibration verification using embedded technology operable at the touch of a button
• Reduce troubleshooting time and cost

Improve Health and Safety
• Eliminate the need to break process seals and avoid potential safety issues
• Verification does not require trips to the field, or hooking extra equipment or adjustment of configurations
• Simplify proof testing in SIL loops

Improve Availability
• Checking meters without shutting down the process results in increased productivity
• Complete proof tests of critical measurements ensure confidence in meter and loop health and extends time between shutdowns
• Access stranded diagnostics or verify the performance of difficult-to-reach devices with Emerson’s Smart Wireless

Improve Quality
• Quickly determine if an unexpected reading is caused by measurement or a change in process conditions that requires action

Reduce Waste & Rework
• Better overall process control avoids wasting key ingredients or needing to rework offspec product

Emerson Meter Verification Ensures Performance
• Results are independent of fluid properties
• Verifies entire meter: electronics, sensor and connecting cables
• Immediate results with no trending
• Printable verification reports with deviation values
• Requires no process shutdown, no extra equipment, no trip to the field, and no changes to meter configuration
• Access at the touch of a button using laptop, 475 Hand-held Communicator or meter interface
• No specialized training required

Eliminate or reduce expensive validation and calibration efforts
• Catch and Weigh with Weigh Scales
• Provers
• Master Meters
• Flow Lab or Factory Return Calibration
• Specialized External Verification Equipment
Historic Meter Verification Practice

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<td><strong>Safety:</strong> Process seals broken, employees in the field</td>
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<td><strong>Cost of verification:</strong> Typically over $6000USD in maintenance costs</td>
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</table>

Typical Verification Processes through the Life of a Meter

A Better Way: Emerson Meter Verification

**Run Meter Verification for annual calibration check**

- **Process:** Start Meter Verification check with press of a button locally or via Smart Wireless
- **Availability:** Continual
- **Test capability:** Device compares itself to baseline health and calibration values. Automatically confirms pass or fail
- **Safety:** No process seals broken, no employees in the field
- **Cost of verification:** 0.1 hours in personnel time

**Run Meter Verification to troubleshoot**

- **Process:** Start Meter Verification check with press of button
- **Special equipment:** None
- **Availability:** Continual
- **Test capability:** Device compares itself to baseline health and calibration values. Automatically confirms pass or fail
- **Safety:** No employees in the field
- **Cost of troubleshooting:** 0.1 hours in personnel time

**Proof test for Safety Loop**

- **Process:** Start Meter Verification check with press of button
- **Special equipment:** None
- **Availability:** Continual
- **Test capability:** Device compares itself to baseline health and calibration values. Automatically confirms pass or fail
- **Safety:** No employees in the field
- **Cost of troubleshooting:** 0.1 hours in personnel time

Over 500 processes use or recommend Emerson Meter Verification technology

- Chemical
- Refining
- Pulp & Paper
- Oil & Gas
- Pharmaceutical
- Metals & Mining
- Engineering Contractors
- Water & Wastewater
- Food & Beverage