

On-site flowmeter verification

Is removing flowmeters from the process an obstacle to calibration in your application? Or are you interested in extending calibration intervals? Endress+Hauser's Fieldcheck verification tool could be the answer.



Fieldcheck enables checks of Proline flowmeters across a range of technologies: Coriolis, electromagnetic, vortex, ultrasonic and thermal mass. In less than 10 minutes you can perform the verification of either the sensor or the transmitter without removing it from the pipeline. In addition, Fieldcheck is capable of simulating a sensor signal to the electronics for testing the transmitter's and/or the PLC's response to flow.

At the end of the sensor and transmitter checks you can be sure that the instrument is healthy and can then retrieve, archive and share verification results. Up to 20 verifications can be archived in the Fieldcheck internal memory and data can also be downloaded to Endress+Hauser's asset management software, Fieldcare. It allows access to the previous verification results (using the meter's serial number) to print the results and generate a verification report.

Intermediate verifications

You can periodically measure the response of a flowmeter to reference conditions. The measured data can then be visualised and compared to the stored data. If you find no significant difference, the flowmeter is still in good health.

What does Fieldcheck offer compared to a true calibration?

Calibration is a comparison of the complete measuring system against a known reference. In comparison, Fieldcheck performs a verification of the original calibration with checks including transmitter and output uncertainty and additional tests of sensor integrity.

What about compliance to regulatory requirements?

As an external calibration reference independent from the unit under test and the application conditions, Fieldcheck offers full traceability. As regards global quality systems such as ISO 9000, which require periodic actions but do not specify which kind of verification, the use of Fieldcheck is an economically attractive and efficient solution. As regards FDA requirements for the life sciences industry, certain auditors now accept intermediate verification between calibrations.

What about traceability?

Any verification report printed shows the serial numbers of the Fieldcheck, the simulation box and the sensor test box. Endress+Hauser can also supply the Fieldcheck's calibration certificate. Calibration of Fieldcheck itself is carried out at Endress+Hauser's accredited calibration laboratory that complies with ISO 17025.

Heartbeat Technology

Our new range of flowmeters (Proline 100, 200, 300, 400 & 500) can be equipped with Heartbeat verification. This is an on-demand check of the flowmeter's health to provide confidence in the measurement. The technology has been independently attested by TUV and does not require any interruption to the process. A quick, two minute test generates a pass or fail result which can be used to extend the interval between calibrations. The flowmeter can store the records of up to 8 tests which can be downloaded and printed for auditing purposes.