

Inline Quality Monitoring





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Inline quality measurement enables processes to run with a higher level of control. Changes in the process, caused by raw materials, energy supply or operational influences, can be detected immediately. Fast reaction enables consistent quality and reduces off-spec products. Inline quality monitoring tracks the process every second to complement lab testing, completing the picture and facilitating continuous quality improvements.

Protect Your Brand

Ensuring Product Quality

While inline instruments will never replace the high precision of lab measurement, they do offer repeatability that facilitates continuous process improvements. Trending of quality control data over time without gaps enables identification of variables that influence the production to help realize quality improvement.

Instruments monitoring for product contamination can provide early alerts and prevent contaminated products from being used in downstream processes.



Data Transparency

Data recorders facilitate easy visualization of trends and capture historical data for analysis and reporting. Safe data storage and email alerts keep you informed of developing process trends.

RSG45 Data Recorder

- Quick commissioning via integrated webserver
- Seamless data exchange between field level and control level
- Encrypted email notification for off-limit conditions and alarms
- Fulfillment of IT security requirements for FDA 21 part 11 conformity

Contamination Alerts

A Magmeter with integrated conductivity measurement can provide early detection of contamination from improperly flushed lines or leaking valves. This facilitates early identification of the source of the issue and prevents contaminated product from being used in downstream processes.



Promag H 100

- Built-in conductivity measurement
- Onboard meter verification with Heartbeat Technology, HistoROM data management, built-in webserver, and Ethernet IP communication option



Avoid Product Losses

Response Time Makes the Difference

Fast-responding instruments can help increase quality directly, while online measurements themselves enable faster response to changes in raw material quality or process drifts. Blind spots between lab samples are eliminated – allowing operators to react quickly to prevent batch loss.

Fast and Accurate Temperature Measurement

In a pasteurizer, overshooting the temperature by even a few degrees increases steam consumption and affects taste, while undershooting can mean unsafe products.

iTHERM® TM411 Fast Response Temperature Transmitter

- QuickSens insert with the fastest response time of any RTD assembly worldwide to allow for a very narrow control band
- t90 response time of 0.75 seconds for the 3 mm insert directly installed or 2.5 seconds with the reduced tip iTHERM Thermowell
- QuickNeck requires no tools for removal for 50% faster calibrations

Inline Density Measurement

Sugar content, concentration or viscosity are parameters that are often critical to product quality. Coriolis offers accurate and repeatable mass flow, density or viscosity determination.

Promass I 100 Coriolis Meter

- Single straight measuring tube with full-bore design
- Real-time process information about corrosion, abrasion, and build-up
- Onboard meter verification with Heartbeat Technology, HistoROM data management, built-in webserver, and Ethernet IP communication option



Increase Your Plant Availability

Influencing Uptime

Increasing your process uptime can be challenging but there are many ways to find small influences that add up to make a big impact.

- Using inline quality measurements to eliminate waiting for lab samples to be verified between process steps
- Preventing rework of off-spec products with elimination of blind spots between samples
- Cleaning of filtration processes based on rising pressure differential rather than time or breakthrough
- Eliminating routine shutdowns for cleaning and calibration of analysis sensors



Filter Monitoring

Proactively monitoring the pressure build up across the filter to facilitate cleaning before a breakthrough happens. Prevent product quality issues and eliminate rework of product that is over turbidity specification.



FMD71 Electronic DP measurement

- High purity ceramic membrane for resistance against vacuum and abrasion
- Fast and easy installation
- 10 times faster response than capillary systems
- Eliminates up to 95% of errors due to ambient temperature effects



Retractable Assemblies and Automated Sensor Cleaning

Retractable assemblies allow for easy removal of pH, ORP, or DO sensors for cleaning or calibrations without process shutdowns. Automated cleaning systems facilitate increased process uptime by eliminating the need to shutdown or remove the probe manually for routine cleaning.



CPA875 Retractable + CYC25 Autocleaning

- No process shutdowns for calibrations or cleaning
- Memosens sensors can be hot swapped with the process running
- Reduces potential contamination of process from dirty sensors
- Regular cleaning increases sensor life and measurement reliability

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