Intelligent Sensor Management
in the Chemical Industries

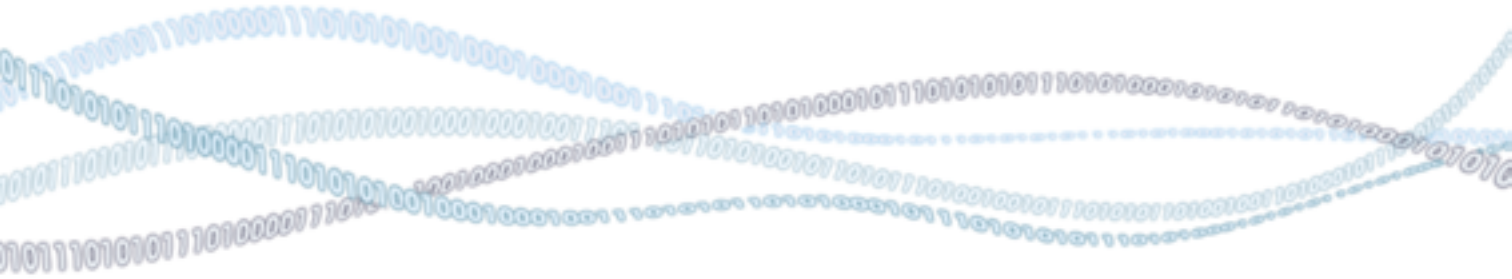
ISM®

You Want to Do More with Less

You're always on the lookout for ways to increase productivity and reduce costs. That's why, to help you do more with less, we've combined our extensive experience in developing advanced measurement solutions, with digital technology.

The result is a process analyzer platform that increases measurement system reliability, improves process safety, and significantly reduces maintenance efforts. You may call it revolutionary. We just call it ISM.

So, if you want to increase measurement uptime, simplify sensor handling, and lower operating costs, read on...



Greater process reliability

Reduced maintenance

ISM®

Easy sensor handling

Greater Process Reliability

In the chemical industries a certain amount of downtime is inevitable and necessary for cleaning or maintenance purposes. This is totally acceptable as long as it is kept to a minimum.

Invaluable in-line measurements
In-line analytical sensors are the eyes and ears of your plant. They are of great value not only with respect to end product quality but also in sustaining equipment integrity. However, constant exposure to often harsh process environments takes its toll and causes them to become increasingly sluggish or inaccurate until they finally fail.

Predictive maintenance
ISM provides diagnostic tools that confront this challenge by keeping you informed on the status and performance of your sensors. Thereby allowing you to correct problems before they affect processes, product quality, or plant hardware.

Digital communication
ISM sensors feature a digital output that ensures 100 % signal integrity. External influences such as moisture will not alter the measured value, giving you greatly improved accuracy.

Increased operational uptime

Easy Sensor Handling

Traditional analog sensors require the use of a transmitter as a man-machine interface. Operation typically involves complicated navigation through complex menu structures when a sensor needs to be calibrated or verified.

ISM sensors come pre-calibrated and start measuring immediately upon connection to the transmitter.

Simple calibration
ISM sensors can be connected directly to a laptop or desktop computer via a USB connection. Using the unique iSense software, calibration is straightforward, and can be done in the comfort of the workshop, away from process and weather. Once calibrated the sensor can be quickly put back into service, saving time spent at measurement points.

Audit trail
iSense automatically stores all activities involving a sensor's calibration and maintenance, and can document this electronically or as a PDF – no more need for writing calibration reports! iSense also gives you a detailed overview of sensor performance, telling you at a glance how long sensors will be fit for measurement.

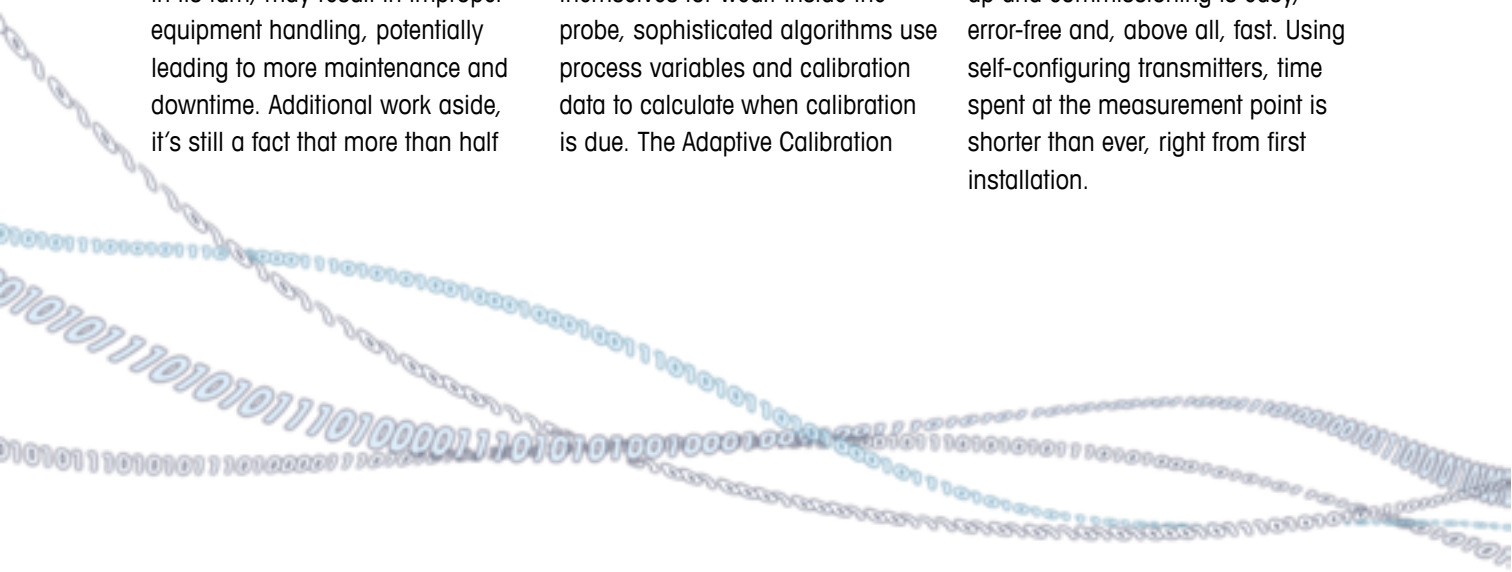
Convenient lifecycle management

Reduced Maintenance

Shrinking of maintenance departments and budgets is a global phenomenon that not only leads to more work being done by fewer people, but also to the disappearance of employee know-how. That, in its turn, may result in improper equipment handling, potentially leading to more maintenance and downtime. Additional work aside, it's still a fact that more than half of all maintenance is conducted based on a fixed schedule and is actually unnecessary.

Advanced diagnostics
ISM sensors continuously check themselves for wear. Inside the probe, sophisticated algorithms use process variables and calibration data to calculate when calibration is due. The Adaptive Calibration Timer allows you to perform true predictive maintenance and use your resources more efficiently.

Plug and Measure
With ISM, measurement point start-up and commissioning is easy, error-free and, above all, fast. Using self-configuring transmitters, time spent at the measurement point is shorter than ever, right from first installation.



Low cost of ownership

ISM Solutions

One universal platform …
METTLER TOLEDO offers an extensive range of in-line solutions that measure key analytical parameters:
- pH
- ORP
- DO
- Conductivity
- Oxygen in gas phase

... for plant-wide use …
From raw material storage to chemical synthesis, from process water preparation to wastewater treatment: Whether in safe or hazardous areas your entire plant benefits from the unsurpassed reliability and ultra-low maintenance requirement that ISM provides.

… adaptable to your needs ...
Our tailored offering ensures full inter-operability with all common control system architectures, and features single-parameter/single-channel instruments as well as multi-parameter/multi-channel devices for convenience and flexibility.

… providing full visibility
Integrating ISM diagnostics into your control system or asset management software enables continuous remote access to measurement performance data, providing you with unequalled process safety at all times.

ISM®


METTLER TOLEDO
< CHAN_1
7.25 pH
32.08 °C
-9.50 mV
METTLER TOLEDO
THORNTON
5000TOC
iSense

For more information:

▶ **www.mt.com/ISM-chem**