



# IND360 Automation Indicators

The Smartest Way to Integrate Weighing



METTLER TOLEDO





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## Automation Solutions

### Measurable Benefits for Engineers and End-Users

Designing and utilizing customized automation solutions requires a significant investment of time and money for engineering, integration, and operator training.

The IND360 compact automation indicator family offers an opportunity to minimize this complexity by standardizing on one globally approved core technology.

Read on to learn how the customizable IND360 is driving consistent, accelerated results in a variety of applications.



## Over 4 Million Combinations Customize to Your Need

The IND360 supports all weighing capacities from 1 microgram up to 1,000 tons, always providing excellent accuracy and industry leading processing speed.

Choose from three compatible weighing technologies to meet your application requirements:

- Typical analog strain gage technology can do the job for many industrial applications where condition monitoring is not required.
- POWERCELL® smart sensors are two-to-three times more accurate than typical industrial load cells due to the built-in microprocessor.
- Smart precision sensors and scales provide the highest resolution with excellent linearity and repeatability.







# Enhanced Connectivity

## Simplifies the Job for Project Engineers

The IND360 compact automation indicator from METTLER TOLEDO helps you to connect all weighing technologies across a broad range of capacities, boost machine performance, and reduce the commissioning time on every installation.

### Your Challenge

#### Extended project lead times

Indicators from different suppliers often require custom programs and frequent updates to integrate and maintain, extending the time spent on each project and reducing efficiency.

#### High programming costs

Integrating weighing systems with PLCs may require advanced programming skills and valuable resources, such as engineering hours, which reduces the margin of projects.

### Our Solution

#### Efficient installation

Quickly connect and communicate with your system in 5 minutes. PLC or DCS integration has never been simpler because the device description files, drivers, and sample code are provided at no cost.

#### Remote monitoring and servicing

The IND360's convenient web interface is simple to configure and enables remote troubleshooting and immediate access to diagnostic and maintenance information.





# Improved Operational Efficiency

## Increases Business Performance for End-Users

For weight-based production processes, the IND360 compact automation indicator from METTLER TOLEDO offers the opportunity to maximize equipment uptime, improve ease of operation, and reduce time spent on training.

### Your Challenge

#### Continuous process monitoring

Non-critical event messages tell you when there is a change of status in your system, but too many alarms may cause operators and machines to ignore them. However, too few alarms result in poor measurements, poor quality, and safety issues.

#### Quick reaction to abnormalities

Troubleshooting is not always easy if operators need to monitor several sensors and systems installed at your site.

### Our Solution

#### Clear process visibility

Smart5™ alarms offer visibility to process status and inventory levels so that you can be confident in your machine performance, avoid out-of-spec products, and eliminate waste.

#### Operator guidance

Built-in condition monitoring and Smart5™ alarms ensure your system is performing as expected. The IND360 provides specific operator instructions to quickly eliminate the root cause of any unexpected problems.





# Tank Inventory Control

## IND360tank/vessel Indicators

### **Accurate inventory control**

Weighing is a very accurate method for monitoring tank inventory. Because it is contact-free, it is not impacted by material type or vessel shape.

### **Clear process visibility**

Receive continuous visibility to inventory levels and equipment status. The bright display provides immediate visualization of filling levels, errors or potentially dangerous events.

### **Easily pass Factory Acceptance Tests (FAT)**

FAT with CalFree and CalFree+ proves that the weighing system is fit for purpose. RapidCal™ tank calibration produces no waste and can be executed up to 3x faster than other calibration methods, saving time and money while ensuring compliance.





# Fast, Accurate Filling Results

## IND360fill/dose Indicators

### **Flawless filling**

Achieve contact-free, hygienic processes. Built-in algorithms optimize cut-off points based on the latest measurements, preventing environment-induced under-filling or over-filling.

### **High-speed throughput**

Ultra-fast processing speeds and I/O control enable fast, accurate weight-based filling of different volumes, container shapes and materials, while reducing hardware costs and performance requirements on the PLC.

### **Flexible functionality**

Fill virtually any liquid or solid material at up to three feed speed levels. Choose from four operating modes: fill, fill/dump, dose and refill/dose.

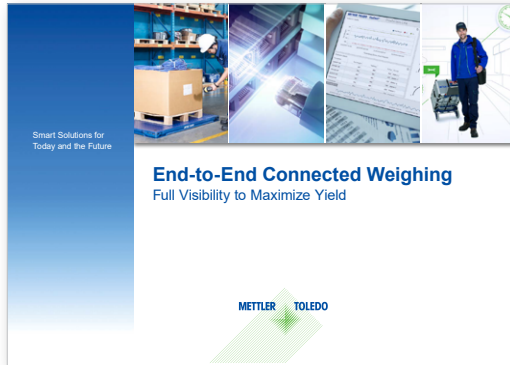






# Gain a Competitive Edge

## End-to-End Connected Weighing



The evolution of METTLER TOLEDO weighing components into intelligent, connected devices—which are increasingly embedded in broader systems—is radically reshaping modern production lines by delivering technology and services that reduce complexity, from initial installation and setup to diagnostics and maintenance.



Download the eBook to see how choosing devices that enable end-to-end connectivity creates substantial cost savings throughout industrial production processes.

► [www.mt.com/ind-connectivity-ebook](http://www.mt.com/ind-connectivity-ebook)



Being able to provide high precision at maximum speed brings a significant advantage to your systems. Partner with METTLER TOLEDO in your next automation projects to meet your customers' speed requirements.



► [www.mt.com/ind-automation-components](http://www.mt.com/ind-automation-components)

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