

# Chemicals

Industrial Weighing and Product Inspection

# 12 News

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## Unlimited Possibilities in Hazardous Areas Safe and Functional Weighing Solutions

**When implementing operational improvements, production engineers face limitations and significant additional costs when working in Ex-areas. With our latest developments, many of those constraints have been eliminated.**

Bulky equipment, limited connectivity, inadequate performance and high installation costs are typical challenges of equipment designed for hazardous areas. METTLER TOLEDO has tackled many of these challenges providing similar functionality to those offered in safe areas.

### Increased uptime with POWERCELL®

Most hazardous-area approved scales use analog load cells with limited functionality. POWERCELL® load cells utilize digital technology and offer condition monitoring to ensure issues are caught early. POWERCELL®

is available for tank, floor and vehicle scales in Zone 2/22 and Div 2 areas.

### New freedom with wireless solutions

New wireless options approved for Zone 1/21 or Div 1 offer advanced versatility for production. Place equipment exactly where you need it and have the freedom to move it again later, without the complicated cabling for data transfer. Read on to learn how these highly functional solutions increase uptime and agility in both safe and classified hazardous areas.

**METTLER TOLEDO**

## Unlock Your Hazardous Area Potential

### 4 Ex-Zone Solutions for Safety and Efficiency

Intrinsically safe equipment will not limit or constrain your weighing processes in classified hazardous areas. Our solutions are highly functional, precise, and safe while keeping your chemical manufacturing process running at peak efficiency.

#### 4 Ensure Precise Quality

For tight processes that require the best in class for reliability, accuracy and versatility, PBK9 high-precision platforms are up for the challenge. Benefit from using one globally approved solution in both safe and hazardous areas.

► [www.mt.com/PBK9](http://www.mt.com/PBK9)



#### 3 Increase Mobility

The IND256x terminal supports mobility even in Zone 1/21 and Div. 1 areas with integrated Wi-Fi. It simplifies communication in fixed installations by eliminating cables. This new freedom in installations for versatile workflows is now available in hazardous classified areas.

► [www.mt.com/IND256x](http://www.mt.com/IND256x)



#### Visit the hazardous portal

The ultimate resource for all your hazardous needs.

► [www.mt.com/ind-hazardous-compliance](http://www.mt.com/ind-hazardous-compliance)



#### 1 Monitor Process Conditions

PowerMount™ weigh modules are equipped with POWERCELL technology providing real-time alerts on load cell conditions. This allows for increased visibility into your tank and vessel scales to help you avoid bad batches and ensure the highest quality output.

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



#### 2 Reduce Recall Risk

PowerPhasePRO Gravity Fall metal detection systems deliver ultra-high sensitivity when inspecting powders. Automated reject systems safely and efficiently remove metal contaminated product from the production process.

► [www.mt.com/md-gravityfall](http://www.mt.com/md-gravityfall)





## Mobility and Safety in Production Freedom of Movement in Ex-Areas

**IND256x offers an economical and versatile weighing solution for classified areas thanks to its reliable, intrinsically safe design. With a built-in wireless option and integrated power supply\* or external battery, it reduces installation costs and gives you the freedom to adjust your workflow on demand.**

► [www.mt.com/IND256x](http://www.mt.com/IND256x)

### Intrinsically safe and secure design

IND256x is globally approved for hazardous areas according to IECEx and ATEX standards for intrinsic safety, providing the same user-friendly look, feel and ease of operation as safe-area terminals. It is designed to operate safely in Zone 1/21 environments where explosive gases or dusts are present.

### Fast to install and easy to use

The built-in power supply\* and communication interfaces make installation and system integration fast and convenient. Due to this integrated design, floor space is better utilized and maintenance activities are simplified. Compared to alternative protection methods, intrinsically safe design reduces downtime from maintenance cycles or equipment breakdowns significantly.

### Simplified maintenance and safety

Maintenance of explosion-proof solutions is time intensive due to required disassembly and assembly of large and bulky enclosures. All service procedures for Ex or flame-proof equipment must be followed meticulously; nevertheless these are difficult tasks prone to error. IND256x's design assures safety while reducing cost of maintenance by up to 60% thus giving a boost to your equipment availability and operational efficiency.

\*Internal power supply only available with ATEX or IECEx approval.



## More Mobility in Your Ex-Area with the IND256x Terminal



### Wireless communication

The Wi-Fi module simplifies communication in fixed installations by eliminating cabling that adds cost to installation and maintenance. In addition, improper cable routing can be a safety risk. IND256x eliminates these issues for increased cost effectiveness and safety.



### Battery powered

The Wi-Fi module option and external battery allow for complete mobile applications in hazardous areas giving you the freedom to adjust your workflow on demand. Increased flexibility in configurations allows easier adaptation to local site preferences.



### Hazardous catalog

Select the right equipment for your hazardous area application and stay compliant. Our catalog shows you how!

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



## Simple Update – Big Impact

### Save Time and Money with PowerDeck™

A global petrochemical manufacturer in the US was frustrated with how much time was spent troubleshooting to solve problems in their drum filling process. Once they upgraded to PowerDeck™ floor scales with diagnostics for immediate and clear information about potential issues, they were able to reduce their maintenance work by almost half.

When previously using floor scales with analog load cells in their drum filling process, production managers were constantly frustrated due to inconsistent weighing results that occurred for unknown reasons. Searching for the root cause of the problem led to production downtime. Once PowerDeck™ floor scales were implemented, these limitations were resolved and maintenance activities were greatly reduced.

Significant process improvements reported by the customer included:



#### Faster troubleshooting reduced downtime

The new floor scale using POWERCELL technology provides alerts for shock loading, debris or extreme temperatures to inform operators of any process deviations. The ability to detect these issues and correct them early was key.



#### Robust design saved maintenance costs

The self-centering design of the rocker pin suspension retains the stability of the floor scale, increases accuracy, and requires less calibration and maintenance activities. This feature further contributed to time and cost savings.



#### Smart operator guidance optimized training

Built-in notification about incorrect drum placement allows immediate reaction to avoid costly errors. These notifications enabled workers to quickly learn the correct placement of drums for ensured accuracy.



#### Tighter tolerances improved yields

PowerDeck offers increased accuracy when compared to analog scales. This allowed for more accurate fill targets and tighter production tolerances, eliminating costly product giveaway and reducing the risk of out-of-specification batches.

“The active alerts from PowerDeck have been a life saver. We’ve saved time and reduced waste by catching issues before they become costly.”

Operations Manager



## Now Approved for Hazardous Areas

PowerDeck floor scales with advanced operator guidance and diagnostics have been delivering on the promise of efficiency, versatility, and ensured quality to safe areas around the globe. Now, these smart features are also available in hazardous areas for Zone 2/22 and Division 2.

► [www.mt.com/Powerdeck](http://www.mt.com/Powerdeck)



#### Video: PowerDeck™ Floor Scales

Discover the many benefits of PowerDeck™ floor scales.

[www.mt.com/Powerdeck](http://www.mt.com/Powerdeck)





## Reliable Product Inspection

### Improving Quality and Productivity

Demands for product quality and integrity have never been greater. This, combined with the need to comply with industry standards and regulations, means that having the right inspection solutions in place is critical. METTLER TOLEDO has the broadest range of product inspection equipment available to meet your production needs.

METTLER TOLEDO provides qualified equipment for hazardous locations

- US/CDN Class/Division qualification by NRTL
- EU ATEX Zone qualification by Notified Body

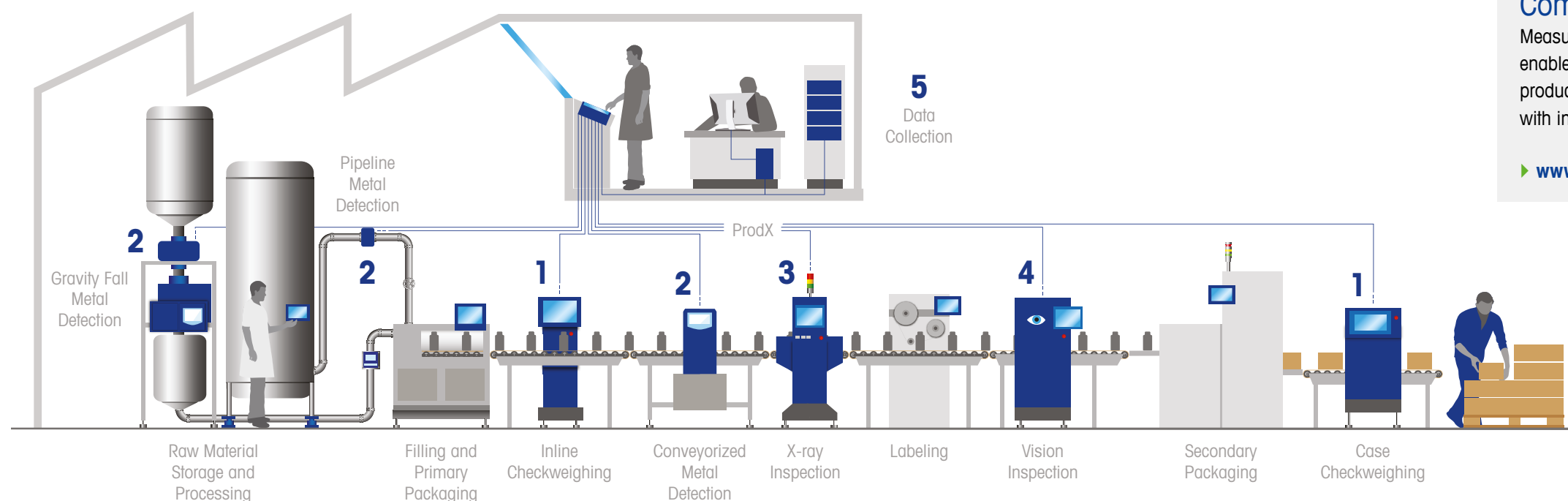


# 5

### Compliance and Productivity

Measurement and recording of inspection data enables in-depth analysis and improvement of production processes, while ensuring compliance with industry standards.

► [www.mt.com/prodx](http://www.mt.com/prodx)



# 1



### 100% Weight Control

Inline checkweighers ensure every package is checked for compliance with industry regulations.

► [www.mt.com/checkweighing](http://www.mt.com/checkweighing)

# 2



### Metal Contaminant Free

A range of gravity-fed, conveyorized and pipeline metal detection systems improves productivity and removes metal contaminants to ensure compliance.

► [www.mt.com/metal-detection](http://www.mt.com/metal-detection)

# 3



### Contaminant Detection and Integrity

X-ray inspection ensures products are free from physical contaminants, while checking package fill levels and integrity.

► [www.mt.com/xray-inspection](http://www.mt.com/xray-inspection)

# 4



### Fully Compliant Labeling

Vision technology checks product label presence, positioning and contents, as well as package quality and integrity.

► [www.mt.com/vision-inspection](http://www.mt.com/vision-inspection)

## Upgrade Your Formulation Workflow

### Traceable – Scalable – Efficient

Want to streamline processes such as blending and mixing to ensure accurate recipe execution? Our new formulation software Form+ provides tight control of each ingredient and ensures consistent batch tracking from goods entry to product delivery.

Form+ enables the management of recipes, including the automatic collection and verification of ingredient weights, step-by-step user guidance, and audit-friendly tracking. As a scalable solution, it is available as either a standalone system or a multi-station networked solution. Form+ helps minimize operator errors, ensure consistent quality, and provide advanced visibility with traceable verification of every batch.

► [www.mt.com/Formplus](http://www.mt.com/Formplus)



#### Achieve 100% batch quality

Visit our formulation page to see how you can easily ensure quality in recipe management.

[www.mt.com/Formplus](http://www.mt.com/Formplus)

### Workflow step

### Benefit



#### Step 1 – Create and Manage Recipes

Form+ adapts to your processes, putting no limitation on the number of formulas, the number of raw materials or the complexity of your recipes. Eliminate the need for intense process or production changes with a simple import of existing recipe databases.

Easily Create Recipes and Define Workflows with a Flexible Recipe Management Tool.



#### Step 2 – Plan and Manage Production

Form+ facilitates recipe-based production planning from any PC, laptop or smartphone. Adapt recipes, materials and workflows as needed. Monitor production orders, track the progress of multiple operators, and easily produce batch evidence reports.

Plan Production and get Optimal Process Transparency Anywhere.



#### Step 3 – Ensure Safe, Correct Recipe Execution

Gain systematic control of your formulation process and eliminate the risk of operator error by automating the data entry process with Form+. Automatically display safety instructions for hazardous materials to protect operators.

Avoid Costly Errors with Advanced Operator Process and Hazardous Material Guidance.



#### Step 4 – Track Operations

Automatic documentation of your workflow ensures traceability, simplifies compliance, and enables faster reaction time to quality issues. Meet the challenge of strict government regulations with easy-to-access historical product data.

Automatically Store Operator Inputs and Data for Audit-Friendly Tracking.







## New Industrial Weighing Catalog



► [www.mt.com/ind-catalog](http://www.mt.com/ind-catalog)  
Free Download

# End-to-End Connected Weighing Solutions for Maximum Process Visibility

From analog to IIoT and everything in between. No matter where you are in your journey to “future factory” status, we have solutions and expertise to help you improve your operational efficiency and gain visibility into your production processes.



Download the Smart Manufacturing eBook for tips on using weighing technology to take your production processes to the next level. Learn about our key concepts of Industry 4.0 to improve efficiency and profitability.

► [www.mt.com/ind-smart-manufacturing](http://www.mt.com/ind-smart-manufacturing)



Download the Data Integration White Paper to learn how to safely transfer your weighing process data to MES, ERP or higher-level cloud systems.

► [www.mt.com/ind-weight-to-cloud](http://www.mt.com/ind-weight-to-cloud)



Discover how the ACI400 Edge Device can connect your existing weighing devices to OPC UA and MQTT communication channels for optimal data management in a digital factory.

► [www.mt.com/ind-iiot-gateway](http://www.mt.com/ind-iiot-gateway)



Take your knowledge to the next level!

► [www.mt.com/ind-4-0](http://www.mt.com/ind-4-0)

[www.mt.com/ind-chem-library](http://www.mt.com/ind-chem-library)

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