

### **Weighing Competence**

Engineering

Software

Automation, System Integration

Service

# **Weighing Systems and Solutions**

Project Guide for Engineers



# **Answers to Your Weighing Challenges** Engineered and Customized Solutions

Whether your process requires weighments in milligrams or tons, METTLER TOLEDO has a solution to fit your needs. We offer a range of robust industrial scales, load cells, and weigh modules as well as software solutions and applications to help you achieve the accurate, reliable results you need in every environment.

Our project requirements list was long, and a challenge for vendors.

METTLER TOLEDO was happy to work with us to meet our requirements, and their consultative approach made the process painless.

# Navigate Challenges with a Reliable Partner

Manufacturers require speed and flexibility to remain competitive as market requirements change. A strong partner is essential to tackle topics such as cost and price pressure, providing compliant products and ensuring safety while maximizing productivity. In cases where product requirements or the production environment are not conducive to "standard" offerings, METTLER TOLEDO can help.

# Customize Products to Your Needs

When "standard" products create challenges, METTLER TOLEDO offers the ability to customize a solution tailored to your needs. Explore ways our products and expertise can help you achieve success.



## **Get the Most Out of Your Process**

6 Key Factors That Enhance Yield









#### Increase productivity

No matter if the process is manual or automatic, enable efficiency in production and ensure every step has a purpose.

#### Achieve accuracy

Reduce giveaway, maintain quality, and instill confidence in processes with truly accurate solutions.

#### **Enhance visibility**

Gain insight into production processes for informed decision-making and traceable results.

#### Ensure quality

Eliminate bad batches and waste by ensuring high quality is achieved every time.



# **Equipment Fit to Your Needs**

# Designs to Match Your Space

Enhance products with mechanical attachments and additions, or adapt dimensions to fit your workplace—our skilled engineering team is ready for your most challenging requests. Custom designs help integrate METTLER TOLEDO products into your processes to meet particularly demanding environmental conditions or process requirements.

Your equipment should fit your needs; you should not have to change your requirements to fit the design or capabilities of equipment. METTLER TOLEDO has many ways to tailor solutions to meet your expectations.



#### Modifying standard scales

Many modifications can be made to standard scale specifications to better fit your process. Customize deck plates for attachments, or add cutouts for easier handling and maintenance. Additionally, attach markings to platforms to speed up the centering of items on the scale.



#### **Custom sizes**

When replacing an existing piece of equipment or trying to meet product sizing requirements, standard sizes can be a challenge.
Custom dimensions allow flexibility to fit equipment into existing spaces, eliminating the need for costly construction and downtime.



#### Surface treatments

In some circumstances, special surface treatments are needed. Some hygienic environments require specific surface finish quality to ensure thorough and easy cleaning. Our standard scale offering can be adapted to meet your surface finish requirements.



### Productivity

Solutions designed with your operators in mind enable better productivity at every workstation. This leads to better overall return on labor and capital.



## **Uptime**

When solutions seamlessly fit into your existing process, you eliminate change management, enabling faster implementation and adoption by operators.



### Accuracy

Achieve consistent accuracy for your process. Even in harsh environments, our robust scales and weigh modules provide fast weighing and accurate results for a long lifetime.

METTLER TOLEDO worked with my engineering team to get our custom floor scales ready faster!



#### Modular components

Modular equipment is ideal when engineering a custom solution, especially when integrating into an existing process. Our weigh modules and load cells allow you to easily build separate weighing components into your solution. This ensures the solution fits your needs and minimizes downtime.



#### Easy-to-use designs

Our solutions are designed with productivity and quality in mind, including optimizing how operators work with the equipment. We combine the manufacturing quality of weighing products with the simple and easy-to-use functionality of a production tool, helping you to maximize your yield.



# **Software Solutions**

# **Extending Your Capabilities**

Improve the efficiency of your applications and processes with our software. Maximize efficiency in production by simplifying formulation tasks or monitoring processes to ensure quality. Custom developed software applications seamlessly fit your requirements, with virtually unlimited possibilities. By combining the capabilities of METTLER TOLEDO software solutions with the durability of our equipment, you gain a powerful solution.

www.mt.com/ind-software

## Unleash the Power of Software Solutions:



# Data collection, storing and visualization

Ensure visibility and traceability of your weighing processes with reliable collection and monitoring of your production data. Streamline data management and use tailored dashboards for easy data analysis and informed decision-making.

www.mt.com/ind-datamanagement



# Formulation and recipe management

Control measurement of raw materials for accurate recipe management and simplify complex and demanding formulation requirements. Additionally, ensure repeatable batch consistency, eliminate human errors and guarantee compliance.

www.mt.com/formulation



# Statistical quality and process control

Achieve quality control and validation of weighing processes. Avoid production stops thanks to comprehensive SPC analysis. Comply with legal requirements by documenting processes and monitoring production quality, and benefit from stress-free audits.

www.mt.com/sqc



### Quality

The right software solutions can ensure tasks are executed correctly to achieve the highest quality. This reduces bad batches and waste while safe-guarding compliance.



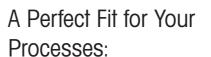
Gain insight into your processes with flexible data analysis. Export and archive data for consistent and safe reporting and track KPIs for continuous performance monitoring and informed decision-making.

## Compliance

Software solutions enable automatic data traceability in your processes to ensure compliance with local and global regulations. Eliminate handwritten records and benefit from smooth audits.

## Productivity

Software fit-for-your-process helps to eliminate unnecessary processes and provides step-by-step user guidance for efficiency. Monitor productivity at each step to see where improvements are needed.





# Bring your ideas to life with fully scalable, modular software

Individualize our programmable industrial terminals or choose desktop software for maximum flexibility. Control, monitor and optimize processes using weighing solutions that offer fully adaptable applications and functions.

The ability to fully adapt software solutions enables more efficient processes and makes my quality assurance team's job much easier!



# **End-to-End Connected Weighing**

# Automation and Integration Made Easy

As Industry 4.0 and IIoT gain traction in more industries, more companies are discovering how connected solutions create improvement opportunities. METTLER TOLEDO is ready to support your operation, whether your site uses manual, semi-automated, or automated work processes, or a combination approach. Optimize the integration of weighing equipment into your processes and achieve process quality while minimizing potential error sources.

Integrating and connecting your weighing equipment is easy when you have the right tools and partner. METTLER TOLEDO's team of engineering and automation experts can help you every step of the way. Discover just a few of our products that enable smooth and effective automation below.



## Connect to the most common network technologies

Standardized interfaces enable communication via the most common industrial PLC, MES, ERP, or Cloud network technologies. Save installation time and connect any type of METTLER TOLEDO scale without software changes.

www.mt.com/ind-4-0



# Upgrade your installed weighing devices for Industry 4.0

The ACI400 IIoT Edge Gateway provides seamless and secure exchange with Cloud, ERP and MES systems via OPC UA and MQTT. It assures METTLER TOLEDO weighing equipment is fit for Industry 4.0 and IIoT applications.

www.mt.com/ind-iiot-gateway



#### Rapid PLC communication

Weight transmitters with 1,000 updates per second provide a broad interface interacting directly with the I/O image of the PLC. Software tools ensure fast PLC integration.

www.mt.com/ind-act-weighttransmitters



### Quality

Achieve process quality with the integration of equipment that tracks each work step, ensuring accurate and traceable data.



Integration of weighing equipment and software into your system helps to monitor the quality of your processes at all times.



Improve your overall productivity by automating processes according to your needs and connecting accessories for ease of use.

## Uptime

Real-time information about device status helps to ensure smooth production runs so manufacturers can avoid unplanned downtime.

METTLER TOLEDO equipment can be fully integrated into our system according to our needs, helping us to enable smoother processes!



# Flexibility and standardization in engineering

The IND131/331 family provides standardized and flexible modules based on the same globally approved core technology. It offers the best fit for companies that aim for customized solutions with the least effort required.

www.mt.com/ind331



## Connect peripherals and accessories

A wide range of peripherals and accessories can be connected to your weighing system to enhance quality. For example, adding a barcode scanner and printer can help you avoid errors during data input and output.



# **Delivering Project Success**

# Amazing Solutions – Enduring Partner

You want a partner who views your project as the start of a relationship, not just a transaction. Our team will earn your trust and deliver the right equipment, expertise, and ongoing service to make your project a success—now and in the future. Even for the most advanced or challenging applications, we offer comprehensive consulting in software, design, automation and system integration. See the various ways we can help you succeed below.



#### Consulting

Benefit from our experience in weighing and weighing integration. Our experts can provide consultancy for your requirements, prepare specifications, and ensure compliance to regulations that apply to your project.



#### Project management

You can expect high quality and professional execution of your project from end-to-end. From conception to completion, our sales representatives maintain close contact with you and are your direct contacts during the entire project.



#### Service and support

METTLER TOLEDO service packages ensure ongoing equipment uptime, performance, and compliance. Take advantage of the experience, skills and thorough know-how of our service specialists. We are here to help!



### Quality

Work with industry experts to select, design and install your solution. Be confident that your equipment will deliver the highest quality.



Ensure compliance to local and global regulations by working with the global experts. Keep equipment compliant via our comprehensive services.

## **Uptime**

Our service experts can help you plan around equipment downtime during your upgrade or installation process, minimizing both cost and headaches.

METTLER TOLEDO strives to make your project a success, from consultancy through the entire lifecycle of your equipment.



#### Global presence

You need a powerful partner that has the global strength and experience to develop products that add real value to your process wherever you operate. Our global presence serves you even in the most remote locations.

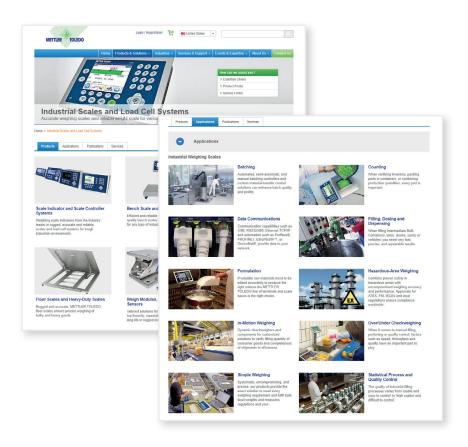
www.mt.com/global-presence



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## **Your Source for Weighing Know-How**

## Learn from Our Experts



Visit our website and see how METTLER TOLEDO can assist you. View up-to-the-minute product and application information, download a copy of the industrial products catalog or request a consultation and see for yourself how we can improve your operations.

#### Discover what's possible:

www.mt.com/industrial

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For more information





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