

# Dairy & Cheese

Industrial Weighing and Measuring

# 2 News



## Increase productivity with efficient filling processes

**The new IND560 weighing terminal enables you to boost speed and precision during the filling process. Choose from a wide range of scales and weigh modules to connect to the terminal.**

The versatile IND560 excels in controlling filling and dosing applications, delivering best-in-class performance for fast and precise results in manual, semi-automatic or fully automatic operations. For more advanced filling, the Fill-560 application software adds additional sequences and component inputs. Without complex and costly programming you can quickly configure standard filling sequences, or create custom filling and blending applications for up to four components, that prompt operators for action and reduce errors.

### **Ergonomic design**

Reducing operator errors is achieved through the large graphic display which provides visual signals.

SmartTrac™, the METTLER TOLEDO graphical display mode for manual operations, which clearly indicate status of the current weight in relation to the target value, helps operators to reach the fill target faster and more accurately.

### **Connectivity and reliability**

Multiple connectivity options are offered to integrate applications into your control system, e.g. Allen-Bradley® RIO, Profibus® DP or DeviceNet™. Even in difficult vibrating environments, the TraxDSP™ filtering system ensures fast and precise weighing results. High reliability and increased uptime are met through predictive maintenance with TraxEMT™ Embedded Maintenance Technician.



**METTLER TOLEDO**

## Speed up manual operations with flexible checkweighing

**Hygienic design, fast display readouts and the cutting-edge color backlight of the new BBA4x9 check scales and IND4x9 terminals set the standard for more efficient manual weighing processes.**

### Flexibility through customization

For optimal static checkweighing the software modules 'check' and 'check+' are the right solutions. They allow customization of the BBA4x9 and the IND4x9 for individual activities and needs, e.g. manual portioning or over/under control. Flexibility is increased with the optional battery which permits mobility.

### Hygienic design

Easy-to-clean equipment is vital in food production environments. Both the BBA4x9 scale and the IND4x9 terminal are designed after the EHEDG and NSF guidelines for use in hygienically sensitive areas.

Even the back side of the scale stand has a smooth and closed surface

which protects from dirt and allows trouble-free cleaning.

### Fast and precise

The colorWeight® display with a colored backlight gives fast, clear indication when the weight is within, below or above the tolerance. The color of the backlight can be chosen (any mixture of red, green and blue) as well as the condition it refers to (e.g. below tolerance). The ergonomic design enables operators to work more efficiently due to less exhaustion.

Short stability time, typically between 0.5s and 0.8s, ensures high throughput and increased productivity.



### Fast facts BBA4x9 and IND4x9

- 6kgx1g, 15kgx2g, 30kgx5g (2x3000d), for higher capacity scales: IND4x9 terminal
- Weights and measures approved versions 2x3000e
- Functions: simple weighing, static checkweighing, dispensing
- Color backlight, bar graph
- Tolerances in weight or %
- 99 Memory locations
- Optional WLAN, battery
- Meets the IP69k protection standards against high-pressure and steam cleaning
- Complete stainless steel construction

### Your benefits

- Fast and precise results and operations
- Higher profitability
- Ergonomic design, simple to operate
- Mobility up to 13h due to optional battery

## Immediate checkweighing results with colorWeight®

### Publisher

Mettler-Toledo GmbH  
Industrial  
Sonnenbergstrasse 72  
CH-8603 Schwerzenbach  
Switzerland

### Production

MarCom Industrial  
CH-8603 Schwerzenbach  
Switzerland

MTSI 44099754

Subject to technical changes  
© 06/2006 Mettler-Toledo GmbH  
Printed in Switzerland



Yellow – weight above tolerance



Green – weight within tolerance



Red – weight below tolerance

The colored backlight of the LC display provides easy-to-recognize indication whether the weight is within the tolerance limits or not.



**EHEDG**



WLAN

# Hygienic design to improve food safety

**HACCP programs, GMP (Good Manufacturing Practice), pathogen monitoring and good cleaning practices are essential for effective food safety plans. Our scales are constructed for compliance with the latest hygienic design guidelines.**

METTLER TOLEDO supports you in complying with the latest food safety standards like BRC, IFS or ISO 22000 by offering solutions which are:

- Compliant with EHEDG (European Hygienic Engineering & Design Group) and NSF (National Sanitation Foundation) guidelines
- Full V2A stainless steel constructions, optional V4A load plates
- Smooth surface (ra < 0.8µm)
- Easy-to-clean construction, no exposed holes
- Radius of inside corners > 3mm

- Ingress protection rating up to IP69k
- Hermetically sealed loadcells

### Your benefits

- Reduce biological and chemical contamination risks
- Fast and thorough cleaning procedures
- Fulfillment of hygiene regulations
- Long equipment life thanks to rugged design



Example:  
PUA579 first EHEDG conform floor scale

## EHEDG

### Fast facts PUA579 low profile scale

- 300kgx0.05kg – 1500kgx0.2kg
- Open design
- Lifting device for easy cleaning
- EHEDG conform (300 and 600kg models -CS/-FL)
- Free size scale dimensions
- Approach ramps

# Guaranteed service Keep your business running

**Avoid unnecessary downtime with our wide range of service packages.**

With a range of innovative service solutions offering regulatory compliance, equipment calibration, training, routine service and breakdown assistance, you can profit from sustained uptime, together with ongoing performance verification and long life of equipment. There is a range of contract options designed to comple-

ment your existing quality systems. Each one offers its own unique set of benefits depending on the equipment and its application.

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





## Weigh-price-labeling

### Ergonomic, modular, fast

**For individual weight labeling of various products, high-speed weighing, smart printing and fast product changes are essential. METTLER TOLEDO offers static and automated solutions for both manual and high-speed prepack applications. Choose from our Etica and PAS product range.**

Challenges faced in the packaging area are:

- Responding quickly to retailer demands while improving margins
- Improving pack presentation
- Minimizing downtime and product giveaways

With a complete offering of cutting-edge weighing technology, high-performance printing, and smart software solutions, we can help you tackle your labeling challenges whether they are very simple or highly demanding.

#### Intuitive human-machine interface

Touch-screen operator displays with graphical icons guide the operator intuitively and reduce nearly every operation to just one or two key-strokes. This interface allows reduced operator training as well as increased operating efficiency.

#### Advanced ergonomics and sanitary design

Our weigh-price labelers are made out of stainless steel for extensive protection against food contamination. Careful attention to hygienic design requirements, with no dead spots and few horizontal parts, ensure that the labelers are easy to clean.

#### Modular design

Our product offering includes both manual and automatic weigh-price labelers constructed of flexible “building blocks.” Different combinations and configurations can meet specific budget and operational requirements. METTLER TOLEDO will help you to select the right:

- Scale performance
- Display technology
- Memory capacity
- IT connections
- Degree of automation
- Integration kits

A large range of options and peripherals give flexibility for meeting unique requirements e.g. wireless network, hard disks, external keyboards, bar code scanners, RFID transponder, dynamic checkweighing, or metal detection.



Etica 2300 standard manual labeler



Etica 2400i combination with automatic stretch wrappers



Etica 2430G multi-conveyer weigh-price labeler range

### Efficient label applicators

The unique Etica label applicator (Etica G series) does not require an air compressor, allowing savings on initial equipment expense and ongoing maintenance costs. Labels are gently applied in any pre-memorized orientation.

PAS systems provide motorized height adjustment and places the label in any corner of the package. Users will have a new degree of freedom in planning their case display layouts to maximize both product presentation and consumer impact.

### Smart label design tools

Retailers want labels to carry clear, correct information, in accordance with their traceability and style requirements.

Our solutions are equipped with label design software tools which facilitate the design of labels customized for retailers demands. A touch-screen allows the user to create specific labels – even with scanned elements such as logos and graphics, pre-programmed label templates, or RFID.

### Versatile integration capabilities

The engineers at METTLER TOLEDO worked closely with Europe's leading automatic stretch wrapper suppliers to design performance-enhancing and cost-effective weigh-wrap-label system solutions. Achieving a small system footprint means the systems require only slightly more floor space than the wrapper alone.

The PAS and Etica weigh-price labelers can be integrated via TCP/IP in a METTLER TOLEDO scale network, in host computer systems and goods management systems.



Garvens PAS 3008/3012 price labelers

### Etica weigh-price-labeling systems

- Static and automatic weigh-price-labeling up to 55 pieces/min.
- Operator displays:
  - 5.7" color back-lighted LCD (Etica 2300 series)
  - 10.4" high resolution touch screen (Etica 4400 series)
- 3 inch graphic thermal printer (125 to 250mm/sec) with fully programmable label format (max. size 80x200mm)
- Data memory:
  - 64 to 256 Mb RAM
  - 128 Mb to 10 Gb mass storage
  - Unlimited number of logo graphics and label descriptions
- Interfaces:
  - 1 serial RS232 interface
  - Optional second RS232 + RS485 + Centronics port
  - Ethernet network communication interface (10baseT), TCP/IP, 2 USB ports (1)
  - Optional: hand-held bar code scanner for automatic traceability data processing



Etica 4400

### PAS 3008 and PAS 3012 weigh-price-labeling systems

- Dynamic weigh-price-labeling of products in motion up to 60 pieces/min (PAS 3008) or 150 pieces/min (PAS 3012)
- Accurate, touch-free labeling by an air jet
- Motorized height adjustment of the thermal printer, with side adjustment bracket – for label application in any desired position
- Thermal print and thermal transfer labels for max. dimensions of 102x88mm (PAS 3008) or 100x100mm (PAS 3012), specific solutions on request
- Data memory: 10 Gb
- Interfaces
  - One serial interface for peripherals (RS232C), e.g. for connection with the communication software networking via TCP/IP, Profibus®/DP, etc.
- Remote diagnostics and extensive statistical report facilities
- Checkweighing mode
- Optional: metal detector
- Optional: RFID labeling
- Special solutions, e.g. for weighing/labeling up to 30kg or 60kg, are available on inquiry

## Tank and silo weighing solutions master your batching processes

**Boost your productivity and process uptime with reliable weighing equipment – improved batching speed and precision, maximum uptime at low maintenance cost.**

Fast, reproducible and reliable batching and filling are key success factors for your production process. Various factors can affect precision: foam can compromise optical/radar sensors, and solids do not distribute evenly in a tank or silo. Our weighing technology is not affected by these conditions and provides direct, accurate and repeatable measurement of mass without media contact. In addition our range of terminals and transmitters/sensors enable easy connectivity to your control systems.

### Key customer benefits

- Increased precision and consistency of your material transfer processes
- Faster batching process through supreme TraxDSP™ noise and vibration filtering
- Minimal maintenance cost

### Fast facts terminals/transmitters: PTPN and IND130

- Exclusive TraxDSP™ vibration rejection and superior noise filtering system
- Easy data integration through a variety of interfaces, including Serial, Allen-Bradley® RIO, Modbus Plus®, Profibus® and DeviceNET
- IP65 stainless harsh versions



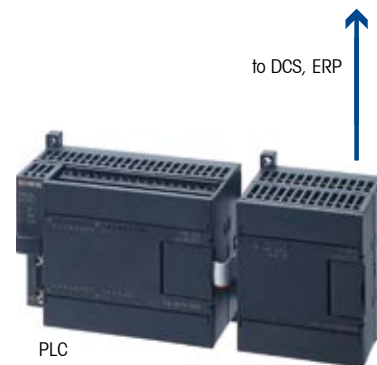
PTPN process terminal

### Process terminal PTPN

- Local display for weight indication and calibration checks
- Panel-mount or stainless steel desk enclosure

### IND130 smart weight transmitter

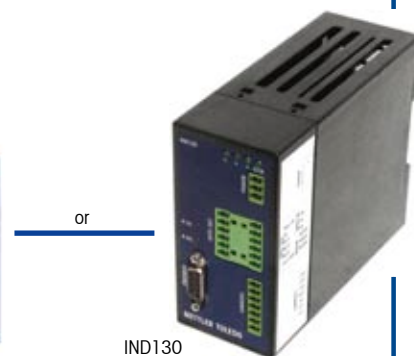
- Direct connectivity where no local display is required
- Quick setup and run via PC tool
- CalFREE™ offers fast and easy calibration without test weights
- DIN rail mounting version



PLC

### Fast facts IND130

- RS232, Profibus® DP, Allen-Bradley® RIO
- Up to four 350 Ω loadcells
- CalFREE™ calibration without test weights
- TraxDSP™ digital vibration filtering



IND130 weight transmitter

### Fast facts FlexMount® weigh modules

- Anti-lift device restrains tank from tipping
- Carbon steel and stainless steel design
- Accuracy: 3000d OIML & NTEP 10 000d CIII
- FlexMount® capacity range: 220 to 20 412kg (250 to 45 000lb)
- FlexMount® HD capacity range: 22 000 to 90 000kg (50 000 to 200 000lb)
- Hazardous Area: ATEX and FM approvals



TraxDSP™ ensures accurate results even in difficult environments with vibration



FlexMount® weigh module

# Quality data under control?

## We have the right solution

**Consistently improving the quality of your products requires the ability of efficiently controlling product and package quality parameters in a fast-changing and highly competitive environment.**



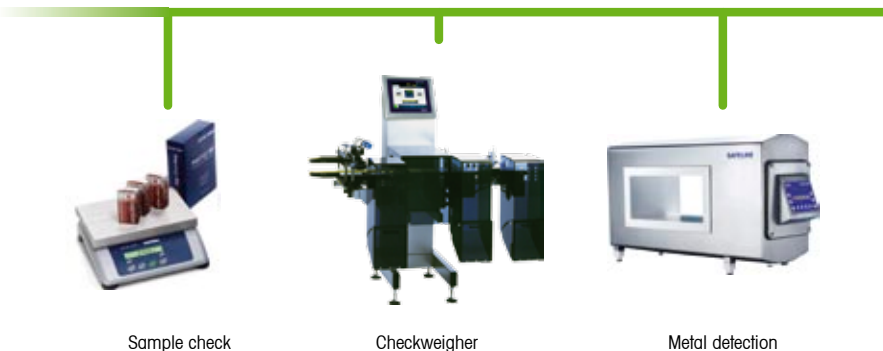
Competition in the food industry – with high volumes but tight margins – causes demands for efficient quality assurance systems. Statistical Quality Control (SQC) systems for permanent online information and documentation about your key quality parameters convert into real cost savings.

Our solutions for Statistical Quality Control (SQC) combine ease of operation, quality data management and analysis functionality.

- We offer mobile compact solutions with embedded SQC intelligence up to networked systems with an SQL database.
- The systems are upgradeable and can be expanded and adapted to meet changing customer needs.
- Simple and intuitive prompts guide the user through the sample process, reducing training costs as well as sampling errors.

- Realtime analysis and alarms help to take immediate corrective measures and to save money by reducing overfilling.

Throughout the manufacturing process, METTLER TOLEDO SQC solutions analyze your important product and package quality parameters and present them the way you want, helping to comply to legislation, to control and document your product quality and your profitability.



Sample check

Checkweigher

Metal detection



FreeWeigh.Net® online quality data analysis

Solutions	Compact/Stand alone		Networked
	SQC14	SQC-BBA/BBK/XP	FreeWeigh.Net®
Max. products stored	16/60	300/100	Unlimited
Tolerance check	■	■	■
Control charts	■	■	■
Histogram	■	■	■
Mean and Standard Deviation monitoring	■	■	■
Local report strip printer	■	■	■
Reports letter printer		■	■
Batch statistics		■	■
Batch tracking		■	■
Adjustment messages		■	■
Warning messages		L	■
Operator identification		■	■
Graphic display		L	■
Electronic activities history			■
21 CFR Part 11 audit trail			■
3rd party device connectivity			■
Attributes and test plans			■
Ethernet device connectivity			■
Real time process monitoring and alarms			■
Distributed data acquisition			■

(L=Limited)



# A wide range of solutions to improve processes

1. SevenGo™ portable pH-meter
2. In-line turbidity, pH and conductivity sensors
3. DL22 Food and beverage analyzer
4. Halogen moisture analyzers

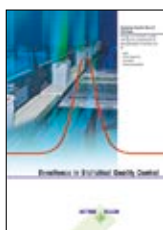


## Share our knowledge

**Learn from our specialists – our knowledge and experience are at your disposal in print or online.**

Learn more about all of our solutions for the dairy and cheese industry at our website. You can find information on a wide range of topics to improve your processes, including case studies, application stories, return-on investment calculators, plus all the product information you need to make an informed decision.

1. Statistical Quality Control/Statistical Process Control
2. Process weighing
3. Predictive maintenance
4. Methods of moisture content determination



1



2



3



4

### Mettler-Toledo GmbH

CH-8606 Greifensee

Switzerland

Tel. +41 44 944 22 11

Fax +41 44 944 30 60

Your METTLER TOLEDO contact:

[www.mt.com/dairy-cheese](http://www.mt.com/dairy-cheese)

For more information