

Meat & Poultry, Ready Meals

Industrial Weighing and Measuring



6 News

12 Tons of Doner Kebab Meat a Day Robust Bench and Floor Scales are up to the Task

Cede Döner Royal GmbH, founded in 1993 by owner Zeynel Demir, has become the largest kebab production plant in Switzerland in the space of just a few years. The vastly expanding operation uses robust METTLER TOLEDO scales with IP69k protection.

The ISO9001:2000 certified family company, which has a share of over 50% in the Swiss market, currently supplies well over 700 customers, and has its own fleet of trucks. The company produces twelve different types of kebab, made from veal, lamb, beef, rabbit, turkey and chicken, and now also produces breads and pastries. "It is an important part of our strategy to be able to offer our customers a complete range of products", explains General Manager Torsten Goebel. Alongside grills, Döner Royal also provides help to new take-away companies by supplying other kebab accessories, such as knives, insulated containers and serviettes, and offers advice on a number of issues.

Guaranteeing food safety

Within just a few years, what began as a two-person operation has developed into a production plant with 2200 square meters of production space and branches in Italy and the US.

Production meets GMP, HACCP and IFS (International Food Standards) requirements. "Food safety is of utmost importance in our operations. Our customers expect high-quality products and they need to be able to rely on us as a partner", says Torsten Goebel. He continues, "METTLER TOLEDO supports us here by offering scales that are suitable for use in hygienically sensitive areas."

HACCP
GMP • IFS



METTLER TOLEDO

Hygienic design suitable for high-pressure cleaning

During kebab production, the weight of the portioned meat skewers is checked before they are packaged and deep-frozen. Several stainless steel 4x9 series bench scales are used in this hygienically sensitive area. This range of scales is characterized by its robust, hygienic design. The open design of the weighing platform, along with the load cell with IP69k protection, allows simple cleaning, even with high-pressure water.

Along with kebabs, Royal Döner also produces a range of fixed weight ready-to-serve meals, which are portioned by hand. Once the target weight is reached, this is indicated immediately on a green backlit display on the BBA449 checkweigher. If the containers are under or overfilled, the display turns either red or yellow. This ensures that operations are always completely efficient. It goes without saying that these scales meet all of the requirements in terms of hygiene. Made entirely of stainless steel, and produced in line with the latest hygiene design guidelines from the EHEDG (European Hygienic Engineering and

Design Group) and the American NSF (National Sanitation Foundation), all of the requirements for basic and simple cleaning have been met: No hard-to-reach corners, no open threads or screws that can gather dust, watertight housing and cells (IP69k) and a completely smooth stainless steel surface with a roughness of $< 0.8 \mu\text{m}$.

Seamless traceability

As a company with IFS Higher Level Status, Royal Döner is not only required to use equipment that can be easily and efficiently cleaned (IFS Version 5: 4.14.2) and is regularly calibrated and maintained (IFS Version 5: 5.4), it must also guarantee seamless traceability (IFS Version 5: 4.16.1 KO criterion). METTLER TOLEDO also has ideal solutions for this.

colorWeight®



Yellow
weight above tolerance



Green
weight within tolerance



Red
weight below tolerance



Fast Facts BBA4x9/IND4x9:

- 6 kg×1g, 15 kg×2g, 30 kg×5g (2× 3000d), for higher capacity scales up to 600 kg: IND4x9 terminal with PBA430 platform
- Weights and measures approved versions 2× 3000e, 5000d NTEP
- Functions: simple weighing, static checkweighing, dispensing
- Meets the IP69k protection standards against high-pressure and steam cleaning
- Complete stainless steel construction
- Color backlight display with bar graph
- Optional WLAN, battery
- Interfaces: RS232 (standard), optional: RS422, RS485, Ethernet, WLAN, USB (Slave)






Publisher

Mettler-Toledo AG
Industrial
Heuwinkelstrasse
CH-8606 Nänikon
Switzerland

Production

MarCom Industrial
CH-8606 Nänikon
Switzerland

Subject to technical changes
© 07/2008 Mettler-Toledo AG
Printed in Switzerland

When handling incoming goods, raw materials such as condiments and meat are weighed on PUA679 low profile floor scales (maximum capacity 1500 kg) with an IND449 weighing terminal. The weighing terminal is directly connected to Royal Döner's ERP system via an Ethernet interface, which records the weighing data and generates barcode labels for the incoming goods.

During condiment and meat weighing, these raw materials are again identified using barcode scanners, weighed according to the recipe using table or floor scales connected to the ERP system and labels are created for condiment loading and the start of production. Finally, a product label listing the ingredients is printed. The use of scales that are directly

integrated in the ERP-solution provided by CSB-System guarantees complete and efficient traceability.

The stainless steel floor scales are of course also designed for use in the food industry. An automatic hoisting system with gas-filled springs allows simple cleaning under the platform, and the load cell with IP68 protection allows it to be permanently submerged in water.

Mr Goebel confirms this: "The user-friendliness, IP protection and robustness of the scales fulfill all of our requirements. Using the complete package from METTLER TOLEDO, which includes service and a DKD calibration certificate, has been a thoroughly positive experience for us."



► www.mt.com/ind-us-videos

Discover all the benefits of the BBA449 check scale with a short video clip



Incoming goods control: PUA679 low profile floor scales with an IND449 weighing terminal (integrated in the ERP-solution provided by CSB-System via Ethernet)

IFS Version 5 requires:

4.14 Equipment

4.14.1 Equipment shall be suitably designed and specified for the intended use. Before commissioning, it shall be verified that the product requirements are complied with.

4.14.2 Equipment shall be designed and arranged so that cleaning and maintenance operations on and located around the installations can be efficiently performed.

4.16 Traceability:

4.16.1 KO A traceability system shall be in place which enables the identification of product lots and their relation to batches of raw materials, packaging in direct contact with food, packaging intended or expected to be in direct contact with food. The traceability system shall incorporate all relevant processing and distribution records.

5.4 Calibration and checking of measuring and monitoring devices

5.4.1 The company shall identify the measuring and monitoring devices required to ensure compliance with product requirements. These devices shall be recorded on a document and clearly identified.

5.4.2 All measuring devices shall be checked under a monitoring system at specified intervals and in accordance with defined standards/methods. The results of the checks shall be documented and corrective actions carried out, where necessary.

5.4.3 All measuring devices shall be used exclusively for their defined purpose. Where the results of measurements indicate a deviation or damage, the device in question shall be immediately repaired or replaced.

5.4.4 The calibration status of the measuring devices shall be clearly identified (labeling at the machine or on a list of test devices).



Condiment and meat weighing: Formulation with IND449 weighing terminal and bench scale integrated into ERP Software

Industry-leading Recipe Formulation Capability for Middleton Foods



METTLER TOLEDO has supplied British catering and bakery mixes company, Middleton Foods, with their highly acclaimed FormWeigh.Net® formulation software, linked to an advanced IP69k-rated ID30 PC-terminal. The system provides the very highest levels of recipe control, stock level data and product traceability.

Higher-level food safety accreditation

Part of the Middleton Group of companies, and committed to manufacturing food-grade products of the very highest standards, Middleton Foods operates a Quality Assurance System that has gained higher-level accreditation by the European Food Safety Inspection Service (EFSIS).

The company's extensive range of catering and bakery mixes includes speciality batter mixes, curry sauce mixes, chicken breadings and seasonings, as well as doughnuts, pancakes, crepes, American pancakes, waffles, sponge mixes, scones and muffins.

Rigorous quality tests

Dedicated to achieving the highest product quality, Middleton Foods ensures that all raw catering and bakery ingredients delivered to its food production site first undergo a series of rigorous quality tests to make sure they conform to the company's most demanding specifications.

Every food mix that Middleton Foods produces is then tested to ensure it is of a consistent and acceptable standard for use by customers. The company then operates a positive release system from its warehouse in order to ensure that only products bearing a quality-approved certificate are certified for dispatch.

FormWeigh.Net®

Key customer benefits of FormWeigh.Net®:

- Right mixture reliably documented
- Graphical support to avoid incorrect mixtures
- Prevention of material wastage
- Acquisition and verification of batch information
- Clear, concise representation of the weighing process
- Maximum process reliability
- Seamless traceability
- ERP integration
- Fast ROI (<12 months)



Fast facts PBA430

- Capacities: 3–600 kg
- IP68 and IP69k protected against submersion and high pressure cleaning
- Stainless steel AISI304 (Surface roughness: <0.8 µm) optionally AISI316
- Dimensions: 229 × 229 mm–600 × 800 mm
- Resolution: 2 × 3000e, multi-range, NTEP approved for 5000d



Enhanced recipe management solution

Looking to further enhance its internal recipe management capabilities, Middleton Foods had originally purchased a METTLER TOLEDO recipe system some fifteen years ago and was impressed with the continued reliability, accuracy and capability provided by that system.

The catering and bakery mixes specialist therefore approached METTLER TOLEDO for a solution that would deliver all the weigh-out, recipe management, yield control and product traceability capabilities required to ensure maximum efficiency and minimum product wastage in their modern food ingredients manufacturing facility.

Simple, straightforward order selection

Integrated with the METTLER TOLEDO ID30 stainless steel industrial PC-terminal, the FormWeigh.Net® software solution provided to Middleton Foods offers simple, straightforward order selection

of the mixing process, recipe control and validation. User-friendly illustrations ensure that mixtures are correct, whilst an automatic error correction facility prevents the loss of valuable ingredients.

Optimal control over formulation

“FormWeigh.Net®,” comments METTLER TOLEDO Product Manager, Jeremy Jervis, “has rapidly made a name for itself in numerous sectors where optimal control over the formulation process is essential. When used in tandem with our ID30 terminal at shop floor level, users benefit from a formulation system that not only provides industry-leading levels of information and control, but will also withstand the cleaning regimes necessary in hygienic processing, pharmaceuticals manufacture and food production facilities.”

Added Middleton Foods’ Factory Manager, Ron Skitt, “As an EFSIS-accredited company, we place considerable emphasis on providing our customers – the majority of whom are household names – with the very highest levels of traceability from raw materials intake to final finished products dispatch. Through investing in METTLER TOLEDO’s technologies we are not only able to provide uncompromising levels of product information, but also enjoy industry-leading recipe control and stock level data capabilities.”



Fast facts ID30 PC terminal:

- Stainless steel housing
- IP69k protected against high pressure wash down
- Display: Active color TFT-LCD, touchscreen
 - SVGA 800 × 600 (12.1")
 - XGA 1024 × 768 (12.1")
 - SXGA 1280 × 1024 (17")
- Keyboard: Membrane keypad with tactile keystroke
- Interfaces: COM 1...10, a wide selection of common interfaces and networks incl. WLAN
- Mounting options: Desk version as standard, wall and panelmount version with additional accessory possible
- Digital Input/Output:
 - Up to 64 In- and Outputs possible
- Up to 3 weighing platforms attachable



► www.mt.com/formweighnet



Dustproof and protected against submersion



Dustproof and suitable for cleaning with high-pressure equipment



European Hygienic Engineering and Design Group



National Sanitation Foundation (US)



Good Manufacturing Practice

Power and Performance for Advanced Weighing Applications



Have you had a complex process or manual weighing application that required you to either sacrifice performance or compromise between conflicting solutions? The IND780 provides all the power, reliability and flexibility in a single terminal to overcome these challenges in managing a weighing process.

The IND780 weighing terminal offers a total control solution with the right combination of precise weighing technology, seamless connectivity, broad communications features and advanced user interface controls.

Maximizing productivity in the toughest conditions

- Panel or wall/desk hygienically designed enclosure with up to IP69k for heavy washdown environments
- Bright 145 mm QVGA graphical LCD display available in monochrome or Active TFT Color
- Different choices of SmartTrac™ displays allow users to easily visualize their over-under check-weighing or material transfer processes
- High speed multi tasking processor

Over-Under SmartTrac™ display



Over tolerance condition



In tolerance condition



Under tolerance condition

with the fastest A/D at 366 Hz provides increased operational throughput

- Handles up to 4 scales and a sum scale concurrently

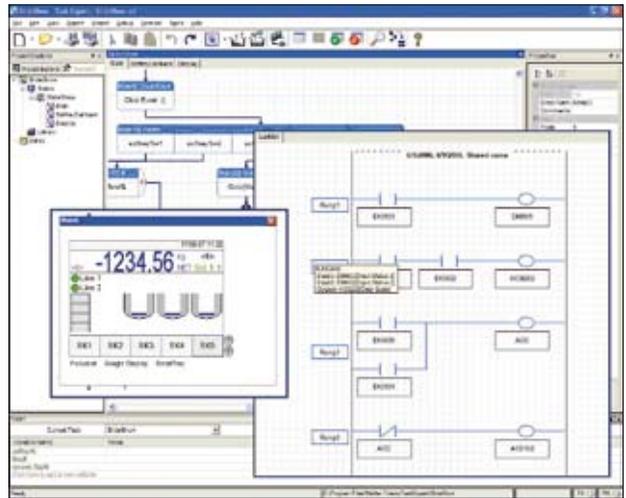
Lowering operating, maintenance, and compliance costs

- Reduce integration costs with the standard 10/100 base-T Ethernet, USB and serial ports
- Direct PLC fieldbus and digital I/O capabilities
- Use TraxEMT™ Embedded Maintenance Technician as a preventative strategy to predict and plan scale maintenance
- Maintenance, alibi and change logs record calibration and maintenance performed on the system, track errors with the system to ensure the weigh-





TaskExpert™ flow-chart based development tool



TaskExpert™ Development Tool program documentation

- Variables list
- Flow-charts
- Parameters list
- Text code

ing is always accurate and record all transactions performed on the system ensuring a maximum of traceability

- Support cluster networking of remote terminals

IND780 TaskExpert™ – meeting customization needs

- Built-in programmable platform to interact with the terminal's variables and functions
- Create custom user interface including graphics, softkeys, labels, text-boxes or selection boxes
- Implement I/O control through the terminal's ladder logic engine
- Create and manage the terminal's database (Microsoft® SQL Server™ 2000 Windows® CE edition)
- Runs up to 12 simultaneous programs
- PC-based development tool eliminates the need to learn complex line-oriented programming languages

- Allows customized interfaces to PC based MES, ERP, and QC software applications

IND780 Key customer benefits:

- Allows fast and repeatable weighing every time
- Easy integration of multiple scales into PLC/ PC networks
- Reduces operations cost with predictive maintenance
- Expandable and customizable solutions

- Intuitive operation and display improves productivity
- Simple yet powerful programmable platform and tool reduces custom engineering effort
- Tough, durable and hygienic industrial design with features to meet standards like EHEDG and NSF
- Fast digital I/O available for accurate material transfer control

► www.mt.com/ind7xx

PC-based programming tool for easy configuration of custom applications

TaskExpert™ Development Tool Layout



A Wide Range of Solutions to Improve Processes

1. 4 Series terminal with colored backlight
2. Weigh modules, load cells and weight transmitters
3. Safeline metal detectors and X-ray inspection systems



1



2



3

Share our Knowledge

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

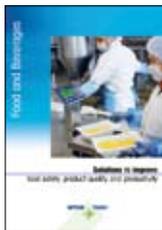
Visit our website to find out more about our solutions for the meat, poultry and ready meals industry. You can find information on a wide range of topics to improve your processes, including case studies, application stories, return-on investment calculators, plus all the product information you need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

Brochures/Catalogs:

1. 4 series stainless steel bench scales (BBA4x9, IND4x9)
2. Weighing Solutions for the Food Industry
3. Industrial Weighing Catalog



1



2



3

USA
Mettler-Toledo, Inc.
1900 Polaris Parkway
Columbus, OH, 43240
Tel. (1) 800 523 5123

Canada
Mettler-Toledo, Inc.
2915 Argentia Road, Unit 6
Mississauga, Ontario, L5N 8G6
Tel. (1) 905 821 4200

Mettler-Toledo AG
Sales International
CH-8606 Greifensee
Switzerland
Tel. +41 44 944 22 11

www.mt.com/ind-meat-ready-meals

Your METTLER TOLEDO contact:

For more information