



Just the Way You Like It Special Filling System for Beverage Ingredients

For filling its 1000 litre containers with beverage ingredients, Döhler GmbH opted for the verifiable "IND690fill" weighing solution from METTLER TOLEDO. This choice was motivated by the way it can be integrated into a Siemens SIMATIC S7 control system, the way the weighing software can be customized and its ability to handle special weighing systems.



Consumers are demanding a more varied diet. The Döhler Group has made its business by identifying trends at an early stage and is now the market leader in Europe for the development, production and sales of ingredients to the drinks industry – e.g. fruit juice concentrate, fruit preparations and flavourings.

In Darmstadt, Döhler GmbH required a verifiable solution for filling 1000 litre containers with beverage ingredients. It was imperative that the filling system could be operated with a Siemens SIMATIC PCS 7 control system. The task was now to establish a suitable measuring technique:

The Advantages of Weighing Technology

Döhler decided on weighing technology overflow meters, as this offers a number of profitable advantages, in particular for filling applications: With this measuring principle, factors such as consistency, conductivity, temperature, possible frothing or generation of bubbles in the weighing sample do not affect filling accuracy. This allows both overfills and costs to be reduced.

Another advantage of weighing technology is the highly robust and low-maintenance design, which is capable of withstanding wet ambient conditions and high-pressure cleaning. The fact





that weight sensors do not come into direct contact with the substances used also boosts service life. As a result, they will not be affected by wear caused by abrasion or by corrosion resulting from contact with chemicals, as is often the case with other measuring methods. For Döhler GmbH, this not only guarantees reliable processes, but also safeguards their investment.

Automation Made Easy

METTLER TOLEDO's easy to integrate IND690fill filling solution has been well received. This verifiable weighing terminal communicates easily with PLCs (e.g. via Profibus®) and sends control signals for conveying systems and dosing valves. Another significant advantage was the option of customizing weighing software programming: The METTLER TOLEDO engineering team adapted the IND690fill to Döhler's exact requirements and process steps and got everything ready for verification.



DöhlerGroup

Leading in Integrated Beverage & Dairy Solutions

The Döhler Group, based in Darmstadt, is one of the leading international producers of fruit juice concentrate, fruit preparations, blends, basic materials, ingredient systems, emulsions, flavourings and colours for the drinks, dairy and ice cream industries. In production facilities and marketing organizations throughout Europe, Asia and America, its 2000 employees utilize their knowledge for the benefit of customers.

As a know-how partner with expertise in fruit and technology, Döhler provides an integrated approach, which extends well beyond its comprehensive product portfolio. In its philosophy of "Integrated Beverage & Dairy Solutions", the Döhler Group also includes trend monitoring, grey goods management, the development of innovative product concepts and consultancy services for issues relating to microbiology, food law, sensory science and filling/packaging technology. Its business activities also include the planning and construction of mixing plants and syrup rooms, in collaboration with its co-operation partner, Ruland Engineering & Consulting.

For more information:
DÖHLER GMBH, Herbert Eickmeier
Telefon +49 (0) 6151/ 3 06 -13 37

Trouble-free Construction of Special Weighing Systems

Due to the special construction of the 1000 litre containers, it was not possible to use a standard weighing platform. Even in this situation, the METTLER TOLEDO engineers were able to help by designing a suitable weighing platform, which can safely accommodate containers with a capacity of 1000 litres (and above) and which can be loaded by fork-lift trucks.

Döhler GmbH has successfully put four of these filling systems into operation in Darmstadt and considers the competence of METTLER TOLEDO – above all the expert consultation and project management from the “process automation” engineering team – to be an important advantage for its company.

► www.mt.com/filling

IP69k

EHEDG

NSF

GMP



Special design balances

Nothing special for METTLER TOLEDO: Our weighing specialists also produce exceptional weighing system designs

Publisher

Mettler-Toledo AG
Industrial
Heuwinkelstrasse
CH-8606 Nänikon
Switzerland

Production

MarCom Industrial
CH-8606 Nänikon
Switzerland

Subject to technical changes
© 01/2010 Mettler-Toledo AG
Printed in Switzerland

Making a Measurable Impact on Productivity

Realizing, maintaining and improving the productivity of your manufacturing processes require thoughtful equipment design, proactive care and dependable partners.

When you are accountable day-in and day-out to meet internal production targets or make just-in-time deliveries to customers, you can't just leave things to chance. The productivity of your process depends on the application of the right weighing equipment, proper maintenance and verification that your process meets requirements. The right equipment must satisfy process accuracy, application, operational and duty-cycle requirements, as well as size, hygienic construction and functional specifications. The on-going productivity and quality of your process, even with the perfect equipment, depends on a proactive maintenance and calibration certification plan.

An effective proactive maintenance plan begins with an evaluation of your business risks associated with potential downtime and inaccuracy. A weighing equipment device in one process may only need occasional maintenance to ensure its availability, whereas in another process, the same device may need frequent and spe-

cific periodic maintenance to guarantee its uptime. METTLER TOLEDO is uniquely qualified to make a correct assessment of the maintenance requirements for your weighing equipment. We evaluate the risks, use, operational complexity, work environment and your maintenance budget. Based on this evaluation we design the right proactive maintenance plan to ensure productivity and quality.

With METTLER TOLEDO service, you get productivity that meets or exceeds your requirements. Whether you need to satisfy ISO9001/17025 requirements or follow GLP/GMP, BRC, IFS, SQF or ISO22000 standards, we offer the required services. Our factory-trained service technicians also know and care about safety. When instructed, we adhere to your safety policies and procedures with an unparalleled level of professionalism. And, our service representatives will be there at the right time, with the right parts, the right tools and the right skills to meet your needs.



Contact your local METTLER TOLEDO service provider to arrange an assessment of your maintenance and calibration needs. You can also ask us to contact you at www.mt.com/service



Your Benefits:

- Properly maintained equipment to ensure productivity and optimize process performance
- Simplified compliance with industry specific standards and regulations
- Clear and precise documentation that equipment meets requirements to reduce the risk of non-compliance

The ServiceXXL portfolio:

- Needs analysis and consultation
- Installation and commissioning
- Calibration and certification
- Proactive maintenance
- Emergency on-site repair
- Modernization and upgrades
- Manufacturer original service parts and test weights
- Repair center exchange plans
- Guaranteed response
- Training programs
- Comprehensive agreements

Product Inspection Solutions

Provide Quality Assurance and Brand Protection

At the R&R ice cream manufacturing site in Germany approximately 250 000 pallets of ice cream are produced annually comprising of over 2000 different variations. To ensure their products are of the highest quality, R&R rely on METTLER TOLEDO to support them in their product inspection requirements.

Nasch, Schatztruhe, Landliebe and Botterbloom – these are all well-known delicious ice cream brands and licenced products produced by R&R Ice Cream Deutschland GmbH. The recent merger of the German-based company Roncadin and Richmond Ice Cream in Great Britain has now made R&R into one of the largest ice cream manufacturers and distributors across the whole of Europe.

Although the vast variety of R&R products vary greatly in terms of their taste and their recipe, all products have one thing in common – they are manufactured in compliance with the highest quality standards. Due to the highly perishable nature of milk, great attention is placed on the highest level of care and the best possible quality assurance as well as the greatest possible degree of consumer protection for all products produced. Both of R&R Ice Cream Deutschland GmbH's production sites are certified in accordance with the EFSIS standard.

Ensuring Product Completeness

At the lollipop production line, an XE3 checkweigher from METTLER TOLEDO Garvens checks cardboard boxes with a set filling of 3 or 12 units for completeness. The checkweigher detects cardboard boxes that are not completely filled and automatically removes these from the production line. At a line speed of

52 metres per minute, up to 150 packages can be inspected each minute. Thanks to optimally positioned product guides, the open cardboard boxes are reliably transferred to the customer conveyor belt after being weighed.

Detecting Metal Contaminants

A metal detector from METTLER TOLEDO Safeline, adjacent to the checkweigher, inspects Weight Watchers' fruit sundaes

Garvens XE3 checks ice cream packages



Unsatisfactory products are reliably rejected by the XE3





Metal detection protects consumers and brand reputation

to ensure that they are free from all traces of metal contamination. With a unique detection sensitivity the “Profile” metal detector detects even non-ferrous metals such as non-magnetic types of stainless steel. Furthermore, the Profile can be easily integrated into existing production lines and thereby ensures automatic quality assurance.



Safeline AdvanCheK inspects ice cream packages for foreign bodies

Inspecting Products in Metallised Packaging

On the “Cono-Line” at the R&R production facility, cardboard boxes filled with ice cream cones are checked using an x-ray inspection system. The AdvanCheK from METTLER TOLEDO Safeline X-ray Inspection enables reliable detection of foreign bodies such as glass, metal, stone and high density plastics. Up to 1 mm stainless steel splinters and 2.5mm small broken glass particles can be reliably detected and automatically rejected despite metallised packaging. Furthermore, the x-ray inspection system can also detect broken or incomplete products.

METTLER TOLEDO provides the entire scope of modern product inspection solutions all under one roof. This makes METTLER TOLEDO the leading global supplier of checkweighers, metal detectors and x-ray inspection systems.



► www.mt.com/pi
 ► www.mt.com/pi-dairy

Consistent and Reliable Metal Detectors Ensure Production of Safe Product

METTLER TOLEDO Safeline metal detectors enable Quali Tech, a manufacturer of flavour particulates to produce safe, high quality products for food processing companies around the world. The gravity-fall inspection systems provide high sensitivity, maintenance-free reliable performance and easy sanitation.

“Quality and safety are our primary objectives,” says Mike Hodgens, corporate vice president of operations at the Chaska, Minnesota based company. “Our products have an amplifying effect. One truckload of our product becomes many truckloads of our customers’ products. So, we’re very careful to deliver only the highest quality product.”

End of Line Detectors

Most of the company’s processes involve grinding and blending of ingredients from a number of sources. Although Quali Tech’s machinery is stainless steel, both ferrous and non-ferrous metals can show up in the ingredients. So a key element of its quality and safety efforts are metal detectors. “They’re at the end of the line, the last quality check before our product goes into its container,” says Hodgens. “Above everything else, we measure the success of our metal detectors based on the production of safe product but there are other factors too, like maintenance and sanitation,” he adds.

Quali Tech produces hundreds of products on each of its production lines, which handle up to one ton of product per hour. To eliminate possible cross-contamination, workers disassemble and fully sanitize the metal detectors during product changeovers.

Reliability Is Key

“We have purchased metal detectors from a number of different manufacturers over the years,” says Hodgens. “We had issues with some of the designs and one required a lot more maintenance than we had expected.

But we also had one from Safeline, purchased in 1995. It was like an island of sanity in all the chaos. Because it gave us no problems, it wasn’t top of mind. It took us a while to realize just how reliably it operated.”



"Zero Metal Free Zone" Technology

So last year, Quali Tech installed its third metal detector from Safeline. The purchased Gravity FlowHD detects and rejects all tramp metal contamination from dry, free-flowing bulk product lines. The unit features patented "Zero Metal Free Zone" (ZMFZ) technology, which reduces the length of the in-feed pipe and allows the reject device to be positioned close to the detector without interference or false rejects. The ZMFZ technology minimizes the overall height of the system while maximizing detection sensitivity.



Key Customer Benefits

- High detection sensitivity to all metal contaminants maximises product quality
- Easy clean design reduces the potential for cross-contamination issues
- Short overall system height enables installation to take place in areas with restricted headroom
- Smooth, quiet reject operation minimises vibration during operation and eliminates false rejects



Consistent Reject Mechanism

A "cowbell" style reject valve, which incorporates high speed pneumatics with a cushioned cylinder, assures accurate removal of contamination while minimizing system leakage. "The reject mechanism on the Safeline unit is very quiet and smooth. It's a very good design," explains Hodgens. "On most other systems, the reject device uses a lot of force to react quickly. That force translates to noise and vibration, which impacts the ability of the detector to remain stable over time. In contrast, the Safeline system is consistent and reliable. Everybody from maintenance to production to quality assurance knows they don't need to worry about the Safeline metal detector."

Sensitivity and Reliability

Hodgens says he believes the Safeline units offer the best detection sensitivity, as well as maintenance-free reliability and easy sanitation. "Typically, there is a trade-off between sensitivity and reliability but not with this equipment. The Safeline metal detectors are very unusual – we get a more durable unit that also performs more consistently at high levels."

Quali Tech has been operating its first Safeline metal detector 24 hours a day, five days a week for 12 years. During that time, the company made only one service call request, and that was their own doing – a forklift operator ran into the keyboard. Also impressive was the service from Safeline's local sales rep firm, Westlake Packaging.

- ▶ www.mt.com/metalDetection
- ▶ www.mt.com/pi-dairy

Replacement of Lost Products by Automated Non-glass pH Measurement

During the cheese drying process a significant amount of product is lost through the wet scrubbing of the exhaust air. With the use of the METTLER TOLEDO EasyClean 400 and InPro 3300 pH sensor this lost product can be recovered and the water reused.

Cheese Production in the US

About $\frac{2}{3}$ of the milk produced in the United States is converted to cheese or cheese products. This roughly equates to 43 billion kg of cheese annually. A significant portion of this cheese is used for producing powdered cheeses, with applications ranging from cheese flavoring to powdered cheese coatings on snack foods. Most major producers of cheese will powder their cheese in one form or another.

Cheese Drying Process

The process of making powdered cheese is a fairly simple one. Cheese is melted into a liquid form and is mixed with water and salts to achieve a mixture that is about 35% solids at a temperature of about 75 °C. The mixture is atomized into a large column that has an internal temperature of 180 to 190 °C. The resulting cheese powder falls to the bottom of the vessel and is collected for further processing or packaging. During this process the hot exhaust air is vented and usually goes through a wet scrubber to capture the fine cheese particles before going to atmosphere.

Once the scrubber water is saturated it is then dumped to the waste water for further processing before being released to the municipal water system while new water is brought in to repeat the cycle.

What the Customer Needed

A large US cheese manufacturer wanted to optimize their process to reduce the amount of cheese lost to the scrubbers.

This would reduce costs in two ways:

- 1) minimize the amount of valuable product lost through the scrubbers, and
- 2) minimize the wastewater treatment cost by reducing the amount of dumped scrubber water.

Our customer investigated the possibility of reusing the scrubber water as opposed to dumping it, enabling them to reclaim the cheese from the scrubber water and save on water by reintroducing it into the cheese/water mixture. What they confirmed was it was not only a viable option, but could also be a significant cost saving.

A major parameter of the process for reuse of this water was to monitor the pH to a very tight tolerance, as narrow as ± 0.2 pH in some situations.

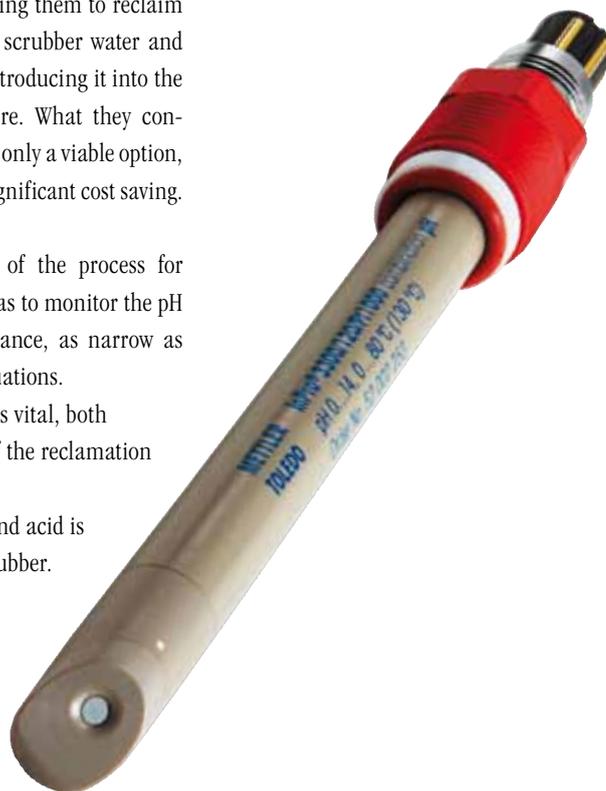
This tight pH range is vital, both

- to the efficiency of the reclamation process and
- to the way water and acid is dosed into the scrubber.

Another critical requirement for this application was that it needed to be a non-glass solution. This process was very near to the final stages of processing so a glass pH electrode was out of the question.

METTLER TOLEDO Solution

METTLER TOLEDO recognized the difficulty of this application and recommended a solution that would not only address the technical aspects but also help in the automation of a process which was in the past, very labor intensive.



InPro 3300 pH sensor

The following components, together, form a full measurement, cleaning and calibration system:

- The InPro 3300 ISFET solid state pH sensor
- The M700 transmitter with the EC 700 module and additional 2700 i module for the use of the InPro 3300 sensor
- The EasyClean 400 automated cleaning and calibration system
- The InTrac 798e hygienic housing

By leveraging our knowledge of the Food and Beverage industry with our advanced liquid analytics product line, we were able to offer a total solution to achieve the process improvement targets of the customer and deliver results to their bottom line.

Precision, Reliability and Safety

METTLER TOLEDO's InPro 3300 sensor satisfied the first critical need of the customer; accurate pH measurement with a non-glass sensor. By using the EasyClean 400 system in combination with the InTrac 798e housing we were able to tackle multiple problems with outstanding results:

- Increased accuracy and reduced manpower:

The customer found that by conducting calibrations close to the range of the process parameter they were able to

maintain a very high level of accuracy. The EasyClean 400 is able to do this through its automated calibration feature and reduce the manpower that is normally required. Accuracy was maintained automatically and was verified through off-line side by side sampling. The level of confidence in the system grew with each sample as the system proved it was able to calibrate itself consistently without any user intervention.

- Increased sensor life:

The EasyClean 400 delivered longer sensor life through the automated retraction and cleaning of the InPro 3300. The process concerned is a very high protein application and constant cleaning is essential in order to maintain the accuracy required. As with most F&B applications this is usually accomplished with in situ hot CIP cycles. In order to protect the InPro 3300 from these harsh cycles the EasyClean 400 system retracts the sensor and places it in a buffer solution during CIP cycles. When the dryer system is ready again the sensor is calibrated and sanitized by the EasyClean 400 and placed back into the process. This was easily accomplished through the use of the custom programming features of the EasyClean 400.

Key Benefits of the InPro 3300

- Unbreakable sensor
- pH 0 to 14
- 0 to 80 °C (32 to 176 °F)
- 0 to 6 bar (0 to 87 psi)
- 45 ° design prevents air bubble problems
- Stable measurement values
- Almost no alkaline or acidic errors
- Rated to IP 68
- Hygienic design / sterilizable

Key Benefits of the EasyClean 400

- Automatic cleaning and sensor calibration
- Freely programmable cleaning sequences and time intervals
- Minimum consumption of buffer and cleaning solution
- Flexible system integration
- Low maintenance costs

Summary

METTLER TOLEDO has been working with the Food and Beverage industry for many years and has the expertise and the product portfolio to meet the tough requirements of this industry. Our customer has a harsh application with some critical requirements. With our non-glass InPro 3300 and our EasyClean 400 automated cleaning and calibration system, we helped our customer achieve their targeted process improvements with additional cost savings and operational benefits better than they initially expected.

- ▶ www.mt.com/cleaning
- ▶ www.mt.com/pro-ph



EasyClean 400 automated cleaning and calibration system



Berlucchi

A Glass of Pleasure

Grapes sampled with GPS, intelligent presses, timely laboratory testing: the art of making wine is changing. Over 40 years, the passion and commitment to the Italian classic method together with utilization of modern technologies contribute to the success of the Berlucchi brand.

Precision Farming

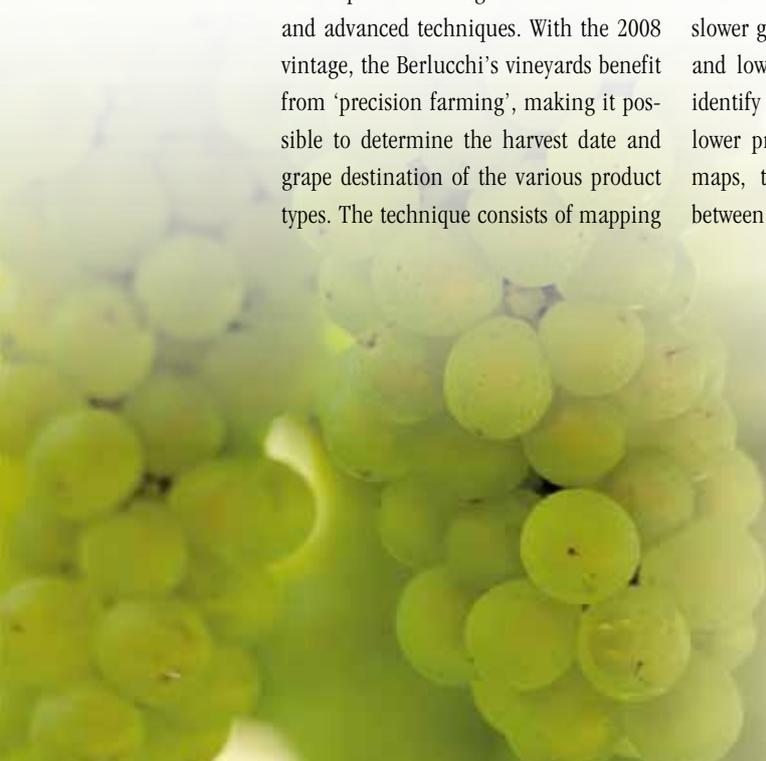
Franciacorta, situated in northern Italy, has partly morainic grounds and is ideal for viticulture. Franco Ziliani developed a high quality sparkling wine here in the 1960s – thus, Casa Berlucchi was born and, in over 40 years, has reached an almost 30% share of the market and an increasingly important presence in international markets using the classic Italian method.

This company now incorporates tradition and experience using the most modern and advanced techniques. With the 2008 vintage, the Berlucchi's vineyards benefit from 'precision farming', making it possible to determine the harvest date and grape destination of the various product types. The technique consists of mapping

land parcels according to soil type and photographing them with infrared rays. The images are then processed according to color. Red areas are characterized by slower growth in maturity, higher acidity and lower sugar levels and green areas identify the fruit with higher sugar and lower production loads. Based on these maps, the sampling technician moves between the rows with a handheld GPS

and visualizes his position in real-time, collecting reliable samples for different ripeness levels.

Grapes are then pressed and vinified separately, creating wines with surprisingly different characteristics even when generated from the same vineyard. This practice is supported by two presses capable of working continually. Benchmarks are an-





Analytical lab of Berlucchi



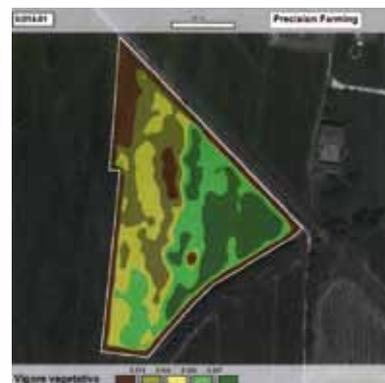
alyzed at each pressing stage (brix, total acidity, pH, etc.), the juice enters various tanks and, after the refrigerated limpid phase, moves to the wine making area.

Precision Measurement

The analytical laboratory is equipped with a METTLER TOLEDO DR40 to measure combined density and refractive index. Its ease of use and reliability is thanks to the built-in Peltier cell thermostat measuring the minimum quantity of sample required for analysis. In addition to distillates alcohol content and brix, the system also determines several other parameters specific to the wine sector, i.e. Babo degrees, potential alcohol from refractive index and total dry extract from relative density. The DR40 is a flexible and valuable instrument for quick winemaking results.

Apart from pH and total acidity measurement, Berlucchi also uses the T70 Excellence Titrator to determine free combined and total sulfur dioxide.

Dr. Ferdinando Dell'Aquila, head of laboratory, comments that, "We chose your company as you represent the best among the market offering. It was only with the use of your instruments that we have achieved such high quality and reliability standards. We also appreciate the efficient after-sales support. We are more than satisfied with METTLER TOLEDO."



Vineyard evaluation with 'precision farming'

- ▶ www.mt.com/one-click-titration
- ▶ www.mt.com/dr

Simple and Efficient Quality Control With RE50

To supply the rapidly growing consumer market in China, production lines are operating all year round to meet demand. To cope with these increasing needs, Tianjin Tingjin Food Co., Ltd in China, has selected METTLER TOLEDO Refractometers to measure BRIX in their quality control lab.

BRIX Applications

Dingyi Beverage Co., Ltd., one of the subsidiaries of Dingxin Group, focuses on beverages such as black and green tea. BRIX is an important parameter in order to distinguish between the different types and quality of beverages. The control of BRIX is significant in beverage production, and is mainly carried out via a measurement of the refractive index. The BRIX function built into the METTLER TOLEDO Refractometer allows users to read BRIX values directly from the screen.

Simple and Efficient

There are 5 units of METTLER TOLEDO's RE50 digital Refractometer for measuring

BRIX in the raw materials and finished products that pass through the quality control lab of the group's branch factory in Tianjin. A built-in peltier thermostat in the instrument offers a superior testing result without the need of a circulating water bath for temperature adjustment. "The RE50 refractometer is so simple to use," says Ms. Zhao Fei, supervisor of IQC Lab in Tingjin. "We have many samples to test each day in order to control the quality of product. The operation of METTLER TOLEDO Refractometer is foolproof. It is very simple, tests samples quickly and is easy to maintain."





Dingyi Beverage Co., Ltd., in Tianjin, China



Ms. Zhao Fei, Supervisor IQC Lab, performs tests with RE50

Unique CHECK Function

“Many other instruments can perform quick tests with high repeatability. The reason why we chose the METTLER TOLEDO Refractometer, besides its speed, is the unique CHECK function which helps to reassure us of the result we get.” says Ms. Zhao Fei. Good repeatability does not necessarily mean accuracy of results. The CHECK function adopts standard samples for tests, and checks the current state of the instrument by comparing the measured result with standard value and error limits. If the result is within the error limits, it means the instrument is in normal working condition and can continue testing samples.

Besides using RE50 to test BRIX, the Dingxin Group also uses METTLER TOLEDO'S DL50 Titrator to measure chloride in food and a pH meter to measure the acidity of drinks. The Tianjin Tingjin Food Co., Ltd. trusts the quality of METTLER TOLEDO products, professional service and support.

- ▶ www.mt.com/density
- ▶ www.mt.com/one-click-titration
- ▶ www.mt.com/pHlab



Use www.mt.com as a Work Efficiency Resource

Webinars – Learn More With Little Time and Effort



Join a wide array of webinars to learn about various topics from choosing the right technology to process optimization.

We offer both **Live Webinars** where you can speak directly with our specialists and recorded **On Demand Webcasts** which are available at your convenience, 24 hours a day.

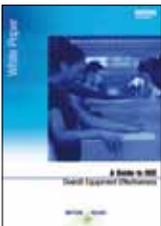
View the full range of webinars:

▶ www.mt.com/webfood



White/Technical Papers

METTLER TOLEDO has published a range of white papers that cover focus areas which enable you to select the right solutions to improve your processes.



OEE-Guide

Overall Equipment Effectiveness (OEE) White Paper

OEE is an important tool in the packaging and food processing industries. This white paper is intended to serve as a guide for professionals in all manufacturing industries who are seeking to become more efficient and to utilise their processes more effectively. Request this free white paper:

▶ www.mt.com/garvens-OEE

Regulatory Compliance White Paper

Learn, how fulfilling regulations can offer multiple opportunities to increase your quality, to save costs and to increase your profitability and productivity.

▶ www.mt.com/ind-regulatory-compliance



Regulatory Compliance White Paper



Technical paper - Detecting More Metal for Increased Brand Protection

Understanding Metal Detection – A Technical Paper

This free technical paper download from METTLER TOLEDO Safeline can help to explain some of the issues and give valuable guidance on how to ensure you are achieving the optimum metal detection performance.

▶ www.mt.com/safeline-detectingmoremetal

Statistical Quality Control Guide

Day after day, thousands of millions of packages of all kinds are filled. This guidebook is a “must-have” for anyone engaged in filling operations!

▶ www.mt.com/sqc-guide



SCQ Guide

Value Calculators – Find Out How to Save Money

Download our calculators and work out how much you could be saving.

Colored weight control system saves both time and money

► www.mt.com/ind-colorweight-calculator

Save money with quality control and correct filling

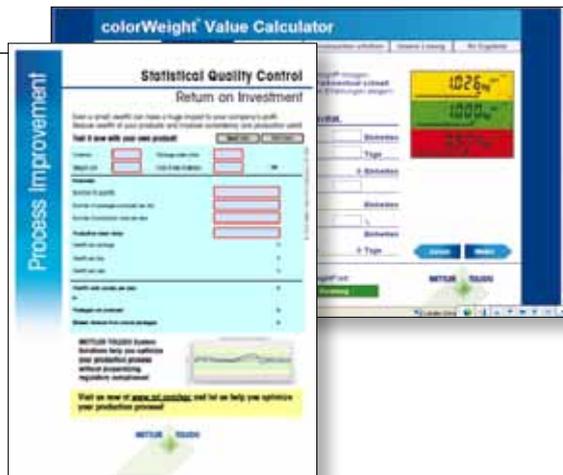
► www.mt.com/sqc-calculator

Eliminate unnecessary costs during formulation and maximize your profitability!

► www.mt.com/formulation-calculator

Learn how to save over 100 000 €/year by reducing only 0.5 g per pack:

► www.mt.com/garvens-savesmoney



Download Comprehensive Product Documentation

Industrial Weighing Catalog

Solutions for weighing and measuring needs in industrial production

► www.mt.com/ind-catalog

Food and Beverages Brochure

Solutions to improve food safety, product quality and productivity

► www.mt.com/ind-food-brochure

Profile Metal Detectors

METTLER TOLEDO Safeline's Profile Metal Detectors provide the ultimate in metal detection performance. They help manufacturers increase productivity, reduce overall manufacturing costs and improve competitiveness.

► www.mt.com/safeline-profile



Know-how – Tips & Tricks for Daily Work Improvements

As an industry leader, METTLER TOLEDO have a wealth of material to help educate and inform you about product inspection and industrial weighing solutions.

New X-ray Inspection Web-pages Now Online!

The new web-pages about x-ray inspection are available in 18 languages and make it easy for food and pharmaceutical manufacturers to choose the x-ray system suitable to their application.

► www.mt.com/safeline-xray

Avoid Contamination – Hygienically Designed Equipment

helps you improving food safety and to comply with food safety standards like IFS, SQF, BRC, ISO 22000 or HACCP.

► www.mt.com/ind-hygienic-design



EHEDG



A Wide Range of Solutions to Improve Processes

1. Weigh modules for tank scales
2. Vehicle scales
3. In-line turbidity sensor
4. Ultra low-profile floor scale with automated hoisting system
5. X-ray inspection solutions



Free Technical Guides and White Papers Help You to Make an Informed Decision

METTLER TOLEDO has published a range of authoritative guides and white papers that cover focus areas which enable you to select the right solution and service for improvement of your processes.

To request a copy of the free guides please visit:

- ▶ www.mt.com/pi-guides
- ▶ www.mt.com/ind-regulatory-compliance



Garvens
Checkweighing
Guide



Safeline
Metal Detection
Guide



Safeline
X-ray Inspection
Guide



Regulatory
Compliance
White Paper

Register for Free Web-based Seminars:



Webinar: Food Regulations

Learn how to comply with food regulations and improve your productivity.

www.mt.com/webfood

Mettler-Toledo AG
CH-8606 Greifensee
Switzerland
Tel. +41 44 944 22 11
Fax +41 44 944 30 60

www.mt.com/ind-dairy-beverages

For more information