

# Chocolate & Confectionery

Industrial weighing and measuring



# 2 News

## Barry Callebaut Weighs with Fast and Precise Measuring Technology

**Barry Callebaut is the world's leading manufacturer of high-quality cocoa, chocolate and confectionery products. In the factory in Lebbeke-Wieze (Belgium) the transfer of raw materials is controlled by METTLER TOLEDO weigh modules, platforms and indicators.**

The plant in Lebbeke-Wieze produces an annual output of more than 250 000 tonnes. At the very beginning of the chocolate manufacturing procedure, during cocoa processing, production is focused on mixing, batching and filling operations with a high throughput and high degree of automation. At this stage METTLER TOLEDO is a reliable partner for fast and accurate measurements.

### Raw material batching and chocolate mass tempering

Batching the exact amount of raw materials is a key factor when producing high quality chocolate. Upon recommendation from METTLER TOLEDO Belgium, Barry Callebaut chose FlexMount® weigh modules and PTPN process terminals to weigh batching and tempering tanks as well as mixing sta-

tions. The solution assures fast and precise weighing of critical components plus easy data integration, which are both vital for an efficient production process.

### Easy data integration

Weighing results are transmitted from PTPN process terminals with Profibus® DP directly into Barry Callebaut's automation system. The PTPN terminals ensure trouble-free connectivity with 20 updates per second.

### Barry Callebaut's benefits

Due to the simple but very effective mounting accessories and the plug and play connection, the METTLER TOLEDO weigh modules and terminals were easy to install. In contrary to other level sensors, load cells are not affected by dust,



**METTLER TOLEDO**

foam and solids which do not distribute evenly in tanks. This ensures accurate and repeatable measurement of mass without direct media contact.

Bart Goetmaeckers, Engineering Manager, explains why he has chosen METTLER TOLEDO weighing equipment: "Due to the installed solution, we have achieved a faster batching process and increased precision and consistency in material transfer. The high quality of the weigh modules results in minimal maintenance costs and maximum uptime, thus improving our productivity."

## Key customer benefits:

### PTPN Process terminal

- Standardization through the whole factory
- Easy-to-integrate
- Fast, reliable weight measurement and data transfer to automation system
- Easy integration with Profibus® DP
- Faster batching process through supreme TraxDSP™ noise and vibration filtering

### FlexMount® Weigh module

- Reliable and proven measuring technique
- Easy-to-integrate
- Easy to service
- Rugged and full stainless steel construction



Raw material batching with PTPN process terminals



TraxDSP™ is a patented filter design that practically eliminates environmental noise and vibration to provide stable weights.



Tempering tanks on FlexMount® weigh modules

## Publisher

Mettler-Toledo AG  
Industrial  
Heuwinkelstrasse  
CH-8606 Nänikon  
Switzerland

## Production

MarCom Industrial  
CH-8606 Nänikon  
Switzerland

MTSI 44099130

Subject to technical changes  
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Printed in Switzerland

The floating, semi-floating or fixed top plate design provides system checking while allowing the structure to expand and contract.

The hermetically sealed load cell offers excellent performance and durability.

The stainless steel load pin makes point contact with the load cell for optimum accuracy.

The anti-lift/jacking bolt prevents vessels from tipping over, and provides a convenient method of lifting empty vessels for maintenance and service activities.



### Net content control for chocolate bars, pellets and cream

Controlling filling or package weights pays off in two ways. First there is full compliance with national and international net content legislation regarding under filling and secondly it assures minimum giveaway. At the molding station for 5kg chocolate bars, the chocolate cream filling station and the pellet packaging line, METTLER TOLEDO weighing solutions control the filling level and contribute to cost reductions.

Bart Goetmaeckers concludes: "We are very satisfied with the quality of the equipment and the service capabilities of METTLER TOLEDO. They support us with their expertise in weighing technology and tailored service, helping us to ensure high uptime, quality and compliance."



5kg chocolate bars: net content control with METTLER TOLEDO platform integrated into the conveyor (see picture below)



## Over 80 Tank Scales Reliably Running Day in Day out

### Fast facts FlexMount® weigh module:

Hermetically sealed stainless steel IP68 load cell – the right choice for hygienic sensitive areas

- Capacity range 110kg – 20.4t
- Top plate rigidly located for easy installation
- Uplift protection
- Large range of thermal expansion/contraction possible
- Painted or stainless steel mounting hardware
- Global approvals standard on every load cell



Dustproof and protected against submersion



25kg chocolate pellets bags: 100% net content control by dynamic METTLER TOLEDO Garvens checkweigher