

# Dispensing & Formulation



**FormWeigh.Net®**

Reliable and Expandable Formulation Control

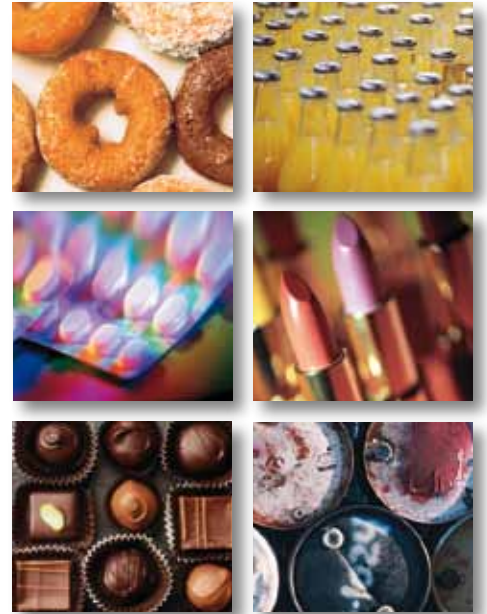
**METTLER TOLEDO**

## Simplify Your Tasks with Smart Formulation

The FormWeigh.Net® system for dispensing and formulation is designed to simplify your complex and demanding formulation needs. Thanks to the intuitive formulation process, you rest assured of stable product quality from batch to batch, while maximizing material utilization, process speed and reducing the amount of manual work involved. Reap the benefits of FormWeigh.Net® in your industry, regardless of whether it is food, pharmaceuticals, chemicals, cosmetics or manufacturing.

The FormWeigh.Net® benefits for your industry:

- Increased productivity
- Guaranteed consistent product quality
- Process safety and stability
- Time savings
- High flexibility

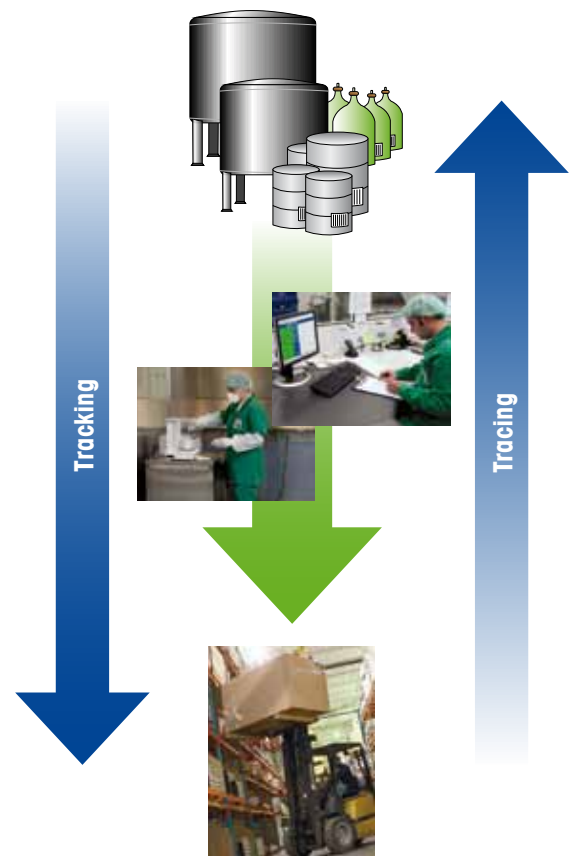


## Achieve Reliable and Traceable Results Every Time

FormWeigh.Net® works alongside your processes and documents them electronically on the centralized database without compromising your flexibility. FormWeigh.Net® allows you to take control of your workflows in such a way that you are always aware of which orders are completed, in progress or awaiting processing.

FormWeigh.Net®, the powerful solution with countless advantages:

- Easy to handle
- Centralized data management
- Accelerated material and data flow
- Batch-oriented workflow from incoming goods to shipment
- Batch fraction management and quantity adjustment
- Multiple formulation methods
- Functions compliant with 21 CFR Part 11, 21 CFR Part 111 and EU 178/2002



# Increase Production Yield and Maximize Utilization of Raw Materials

In the case of manual processes, stored raw materials may expire before they enter production or they may become unusable as a result of formulation errors.




You may therefore have to dispose of expensive raw materials, drastically reducing your production yield and at the same time incurring additional costs for the disposal of waste.

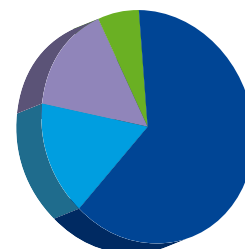
Thorough operator training and powerful functions, such as FEFO (First Expire – First Out), allow you to fully utilize your materials and reduce waste, which consequently makes your production more cost-effective and environmentally friendly.

FormWeigh.Net® provides:

- Clear procedures and guidance
- Reduced confusion of components
- Verification scanning prior to dispensing


**Total raw material costs can be divided into:**

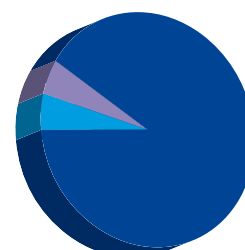
-  Effective production yield
-  Expired stock
-  Bad batches



Paper-based dispensing process

**Additional costs incurred through process errors**

-  Disposal costs for bad batches and expired materials



FormWeigh.Net® guided process

# Boost Your Performance Increase Operator Efficiency

If two people perform the same job, you should benefit from the output of two people. Pharmaceutical companies that do not make use of a supporting system usually apply the countercheck principle in order to comply with regulatory requirements. This means that two people work together to achieve the output of only one person. This is an extremely high price to pay for process reliability, which can be avoided by utilizing a system to provide the second pair of eyes.

FormWeigh.Net® guides your personnel step by step through the dispensing and formulation process. Furthermore, it selects the suitable balance or scale fully automatically. The second person can be assigned to other duties, freeing up resources and increasing productivity.

Key performance indicators of FormWeigh.Net® in pharmaceutical applications:

- Countercheck no longer required
- Seamless documentation at the push of a button
- Clear material assignment with machine-readable labels
- Automatic API or component adjustment
- Minimized operative overheads (administration and documentation)



In a manual process, two people work together on the same order to countercheck whether it has been executed correctly.



FormWeigh.Net® enables system-guided order processing by one person, doubling the effective productivity

# FormWeigh.Net®

## Reliable Results Throughout Your Entire Formulation Workflow

Company									
Recipe details									
Recipe No.	Material Name	Material Code	Material Unit	Material Weight	Material Density	Material Volume	Material Status	Material Location	Material Expiry
010001	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010002	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010003	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010004	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010005	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010006	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010007	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010008	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010009	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010010	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011

Basic recipe for order generation.



PC-based ID30 terminal with touchscreen for efficient interaction with FormWeigh.Net®.

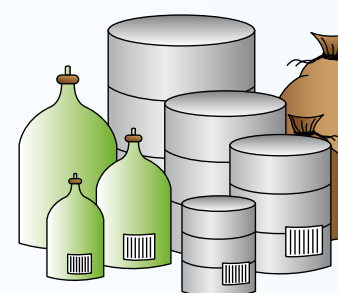


Centralized SQL database server

### Central dispensing

Material No.	Material Name	Material Code	Material Unit	Material Weight	Material Density	Material Volume	Material Status	Material Location	Material Expiry
010001	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010002	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010003	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010004	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010005	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010006	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010007	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010008	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010009	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011
010010	ETHANOL	ETHANOL	kg	1000.000	0.789	1267.414	A	06-10-2009	06-10-2011

List of pending orders – ready for execution.



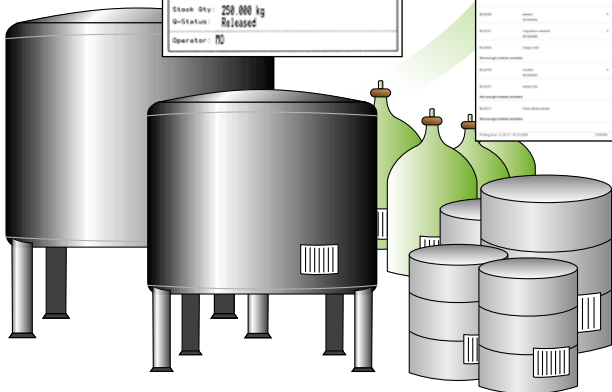
Optimized material picking from stock – according to First Expiry – First Out (FEFO) principle.

Stock	
Nutrihealth Corp.	
Date: 06.10.2009 11:35:25	Exp. Date: 28.06.2011
Material Name: ethanol	
Mat. No.: N-22100	Lot No.: 061009007
Stock Qty: 250.000 kg	
Q-Status: Released	
Operator: RD	

Order picking list	
Material No.	Material Name
010001	ETHANOL
010002	ETHANOL
010003	ETHANOL
010004	ETHANOL
010005	ETHANOL
010006	ETHANOL
010007	ETHANOL
010008	ETHANOL
010009	ETHANOL
010010	ETHANOL

Nutrihealth Corp.	
Weighing	
Product name: Nutrihealth Capsules 350	
Order: 20091006-04	
Lot: 20091006-04-01	
Material: ethanol	
Lot No.: 061009004	
Tare Weight: 260.4 g	
Target Weight: 1.000 kg	
Real Weight: 1.0042 g	
Operator: RD	Date: 06.10.2009 13:52:43

Dispensed materials for customer order – ready for processing.



Raw material stock with unique identifiers managed by FormWeigh.Net®.

METTLER TOLEDO industrial terminals with IP69k compliant ingress protection for hygienically sensitive or harsh environments.



IND780 terminal with embedded FormWeigh.Net® application interface.

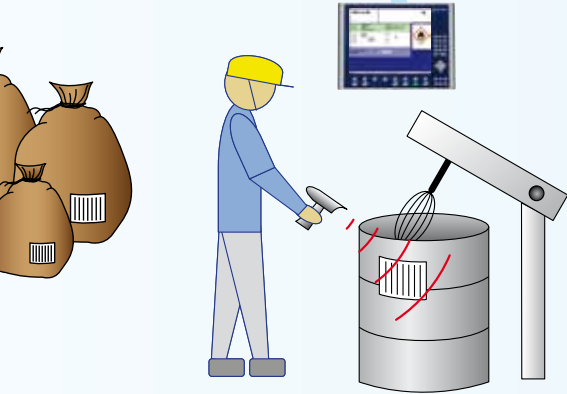


The IND560 terminal seamlessly integrates automatic dosing with manual dispensing into the formulation process with FormWeigh.Net®.



Optional online exchange of production data with ERP systems (e.g. SAP) to prevent errors and data redundancy.

## Production



System-guided component processing with on-screen instructions.

## Reports

Production				FormWeigh.Net			
Manufacturing report							
Company:	Plant No.:	Production No.:	Production Date:	Production Start:	Production End:	Production Status:	
2009000002	A-12001	8003	08.10.2009				
Product:	Lot No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:
01010001							
Production Date:	Production Date:	Production Date:	Production Date:	Production Date:	Production Date:	Production Date:	Production Date:
08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009
Production Time:	Production Time:	Production Time:	Production Time:	Production Time:	Production Time:	Production Time:	Production Time:
11:28:39	11:28:39	11:28:39	11:28:39	11:28:39	11:28:39	11:28:39	11:28:39
Production Status:	Production Status:	Production Status:	Production Status:	Production Status:	Production Status:	Production Status:	Production Status:
OK	OK	OK	OK	OK	OK	OK	OK

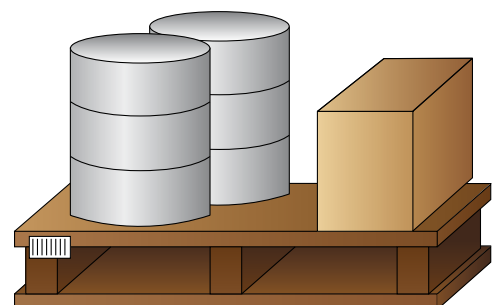
Company		Plant No.		Production No.		FormWeigh.Net	
Lot trace list							
Production number:	Material no.:	Material lot number:	Material description:	CC: status:	CC: status:	CC: status:	CC: status:
01010001	01010001	01010001					
Batch No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:	Batch No.:
01010001	01010001	01010001	01010001	01010001	01010001	01010001	01010001
Production Date:	Production Date:	Production Date:	Production Date:	Production Date:	Production Date:	Production Date:	Production Date:
08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009	08.10.2009
Production Time:	Production Time:	Production Time:	Production Time:	Production Time:	Production Time:	Production Time:	Production Time:
11:28:39	11:28:39	11:28:39	11:28:39	11:28:39	11:28:39	11:28:39	11:28:39
Production Status:	Production Status:	Production Status:	Production Status:	Production Status:	Production Status:	Production Status:	Production Status:
OK	OK	OK	OK	OK	OK	OK	OK

Comprehensive documentation for completed batches ensuring traceability and confirming accurate completion.

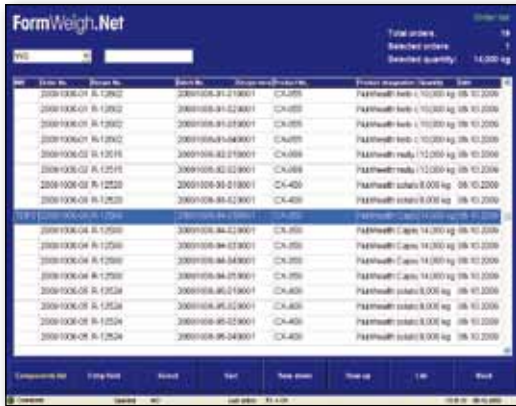
FormWeigh.Net® allows you to perform your formulation tasks flexibly according to your process requirements.

The system supports and streamlines your dispensing and formulation processes, with clear guidance and full traceability to ensure stable product quality.

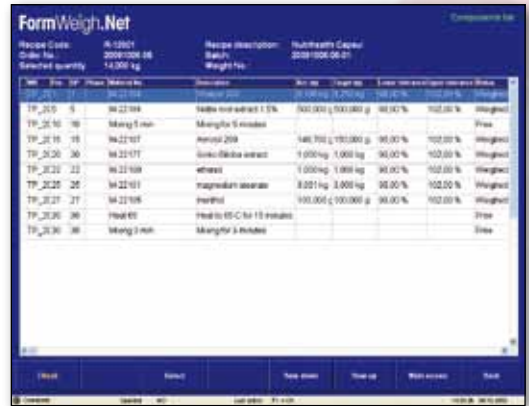
## Finished Product



# Your Daily Tasks Easily Accomplished



FormWeigh.Net® order lists displaying pending formulation tasks.



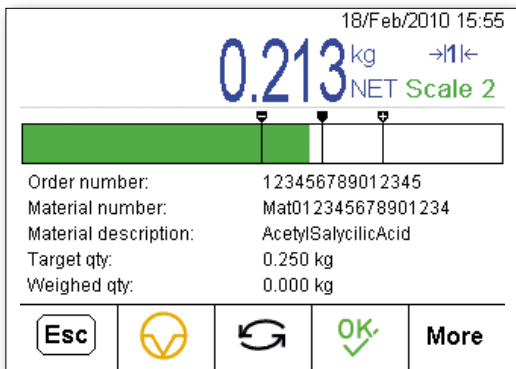
Sequence of recipe components and instructions on the component list at the weighing station.



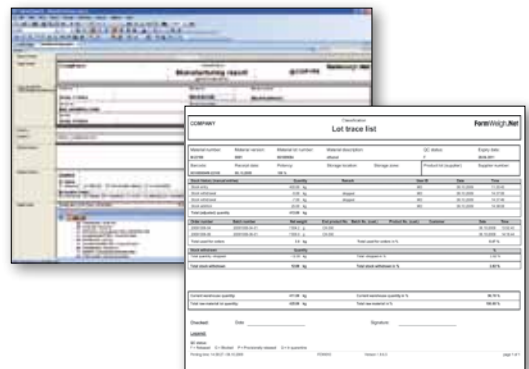
The FormWeigh.Net® weighing station software shows all key component information at a glance, including pictograms, such as hazardous symbols.



The real-time progress bar is clearly visible to the operator and changes its color according to the weighing progress.



IND780 formulation terminal.



Use Crystal Reports to design your own customized report layouts.



# The Flexible and Modular Standard Formulation Solution



## What you stand to gain

- Increased production yield and optimized raw material utilization
- Reduced bad batches and batch re-work
- Less wastage
- Advanced stock management
- Clear and streamlined processes
- Seamless recipe handling
- Full traceability throughout your production process
- Increased production flexibility without compromising process stability
- Increased productivity in dispensing
- Compliance with the FDA and other regulations regarding audit trail and process control, such as 21 CFR Part 11, 21 CFR Part 111 or EU 178/2202
- Fast return on investment

## What we promise to provide

- A scalable, standard system, flexibly adapting to your needs
- A modern and continuously updated system for your dispensing and formulation tasks
- Flexible adaption to changing conditions
- Intuitive operation and simple handling
- Terminals and weighing equipment which have been tried and tested in the industry
- Minimum training requirements and maximum prevention of operator errors
- Central data storage with maximum availability
- Ideal interaction between software, hardware and peripherals
- Maximum investment protection through long-term product maintenance and proven upgrade strategies

Find out how FormWeigh.Net® can save you money:

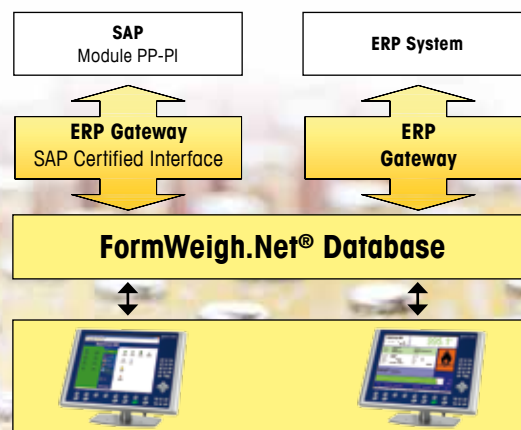
► [www.mt.com/formulation-calculator](http://www.mt.com/formulation-calculator)

## ERP Integration – Seamless Online Data Management

### Share data between FormWeigh.Net® and your ERP/MES system

If you maintain your raw materials and orders on your ERP system, the FormWeigh.Net® ERP Gateway brings your efficiency to the next level by exchanging this data through a standardized interface.

FormWeigh.Net® eliminates the need to re-enter master and stock data manually through continuous synchronization with your ERP system. This increases your overall speed and reduces the risk of errors. METTLER TOLEDO offers various types of ERP Gateways, which are compatible with most ERP systems, including SAP.





# Professional Software Services

**METTLER TOLEDO offers you a wide range of professional services to ensure smooth and efficient project progress and guarantee long-term system reliability.**



## Implementation consultation

Experienced project engineers plan the implementation of your FormWeigh.Net® system together with you and the future system users. Your requirements and their realization in the system are clear right from the start, meaning that you won't have any unwanted surprises once the system is in use.

## Data integration

If you want your FormWeigh.Net® system to exchange process data with your ERP system, don't hesitate to discuss your requirements with us. We provide consultation and support so that you'll benefit from a seamless integration.



## Training

Comprehensive user training will ensure that your operators are familiar with the system and are able to fully utilize it.



## Software support

A support agreement ensures that your FormWeigh.Net® system is always running at an optimum performance level. Regular maintenance and updates keep your system up-to-date and guarantee maximum system availability. This protects the investment you made and mitigates against costly upgrades in the future.

## Computer system validation

Validation is an absolute must in regulated industries. Right from day one, FormWeigh.Net® was developed to allow efficient and seamless system validation. METTLER TOLEDO offers comprehensive validation documentation (CSV Pac) for supplier audits and IQ/OQ. Experienced and fully trained validation specialists can assist you in this process.



**ServiceXXL®**

Tailored Services

[www.mt.com/formulation](http://www.mt.com/formulation)

For more information

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Subject to technical changes  
© 04/2010 Mettler-Toledo AG  
Printed in Switzerland  
MTSI 21901141