FreeWeigh.Net®

Available Optional Modules

Functionality

| Batch Handling |
| Release Criteria |
| Attributes & Testplans |
| Time Controlled Sampling |
| Monitoring Process |
| Errors & Interventions |
| Multihead Statistics |
| Free Reports |
| Testitem Versioning |
| Audit Trail / 21 CFR Part 11 |
| Adjustment Algorithms |
| SPC |
| Data I/O |
| XML Link |

Connectivity

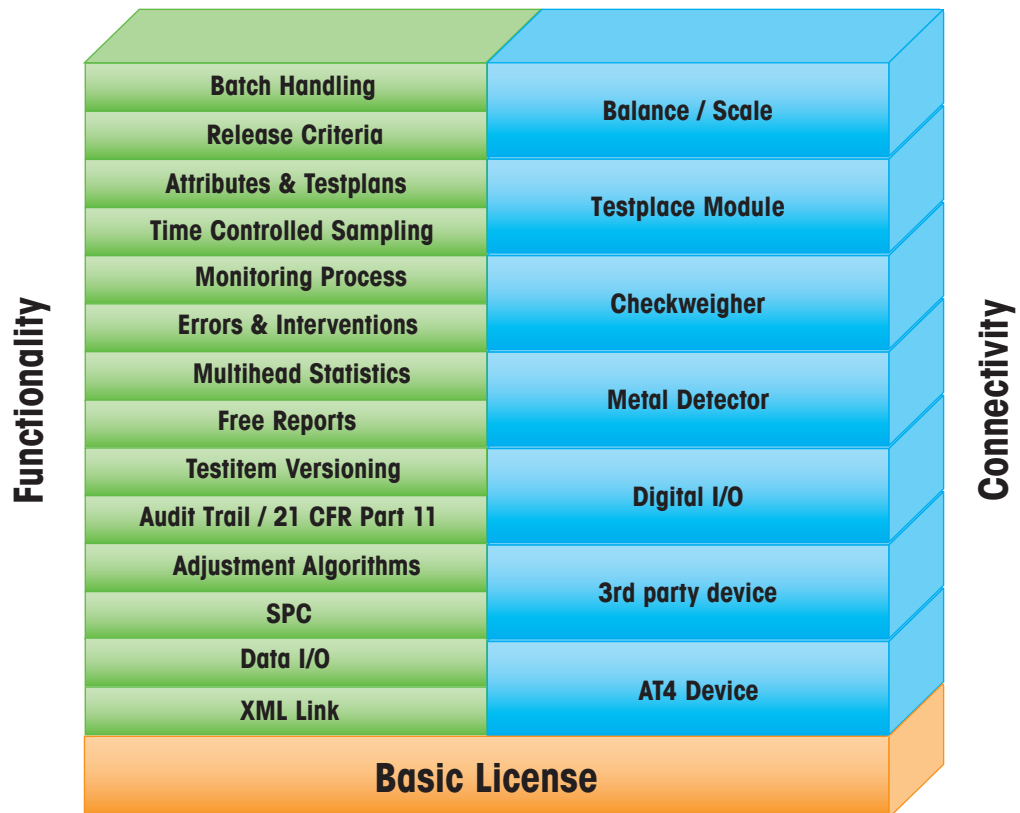| Balance / Scale |
| Testplace Module |
| Checkweigher |
| Metal Detector |
| Digital I/O |
| 3rd party device |
| AT4 Device |

Basic License

Powerful basic license with optional function enhancements

The basic license provides enough functionality to satisfy a large range of applications. All statistical algorithms for mean value, standard deviation, range and much more are built into the basic package as well as the configurable alarm system, the activity logging, the comprehensive graphics and the legal reporting. This powerful package can be enhanced with additional functions without any installation of further software.

Trial activation of optional modules

FreeWeigh.Net® options can be temporarily activated for a time limited trial.

Wide choice of connectable equipment

FreeWeigh.Net® provides built-in device drivers for a vast range of METTLER TOLEDO weighing and measuring equipment. No matter whether the customer uses analytical balances or precision scales, checkweighers or metal detectors, they can be easily connected into the system. With the optional Device Integration Utility FreeWeigh.Net® is able to process data from almost any kind of measuring device and third party equipment, and integrate it into quality assessment process. This makes FreeWeigh.Net® a strategic instrument to control production quality in almost any industry and product.

METTLER TOLEDO
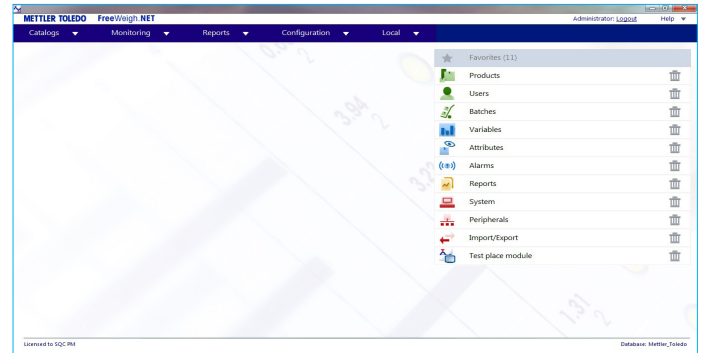
FreeWeigh.Net®
Basic License Module

Comprehensive quality assurance with the basic license

For many customers using FreeWeigh.Net® for net content control, including the associated reporting, the basic license with the associated device licenses is all that is required. All important functions are already included making it a very powerful quality assurance system. Even the license-free SQL Express database is included in the installation package making the system setup straightforward. According to growing customer needs FreeWeigh.Net® can be continously enhanced without software installation.

Enhancement according to customer needs

For customers who want to enhance their quality control FreeWeigh.Net® offers a wide range of optional functional modules:
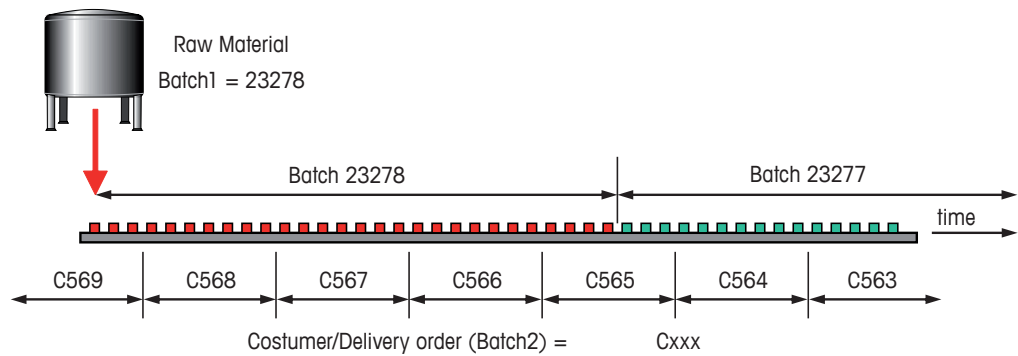
– Remote Testplace Module
– Batch Handling Module
– Attributes & Testplans Module
– Adjustment Algorithms Module
– Free Reporting Module
– SPC Module
– Audit Trail / Part 11 Module
– Errors & Interventions Module
– Monitoring Process Module
– Time Controlled Sampling Module
– Release Criteria Module
– Multihead Statistics Module
– Data I/O Module
– XML Link Module

The FreeWeigh.Net® basic license provides the power for a comprehensive quality control system

– 3 concurrent users
– Weight data acquisition
– Net content graphic monitoring
– Alarm and activity monitoring
– Automatic and manual test site allocation
– Standard reporting for legal needs
– User profiles and electronic signatures

METTLER TOLEDO

FreeWeigh.Net®
Batch Handling Module

Raw Material
Batch1 = 23278

Batch 23278   Batch 23277

time

C569   C568   C567   C566   C565   C564   C563

Costumer/Delivery order (Batch2) =   Cxxx

Working with two concurrent batches

Working in batches is increasingly the standard way of production. Whilst in the past this was only a duty in the pharmaceutical industries, new regulations such as IFS (International Food Standard) require producers of food products to keep batches separate and to make their processing fully traceable. As every production has a material input and output and since their quantities are not equal it is crucial to have access to two concurrent batch statistics. The FreeWeigh.Net® Batch Handling Module enables the user to assign two batch numbers to each random sample, thus providing the batch statistics at a key stroke.

Individual approval of batch status

A batch normally has the stages "created", "released", "terminated" and "approved". In most companies these stages require approval by different individuals. In addition, batch release and batch approval requires authorization by two departments – production and quality assurance. All these features are available in FreeWeigh.Net® and can be controlled through access rights and, if needed, by electronic signatures. These important functions ensure that no batch proceeds into the next stage without being checked and no batch leaves the factory without satisfying the quality requirements.
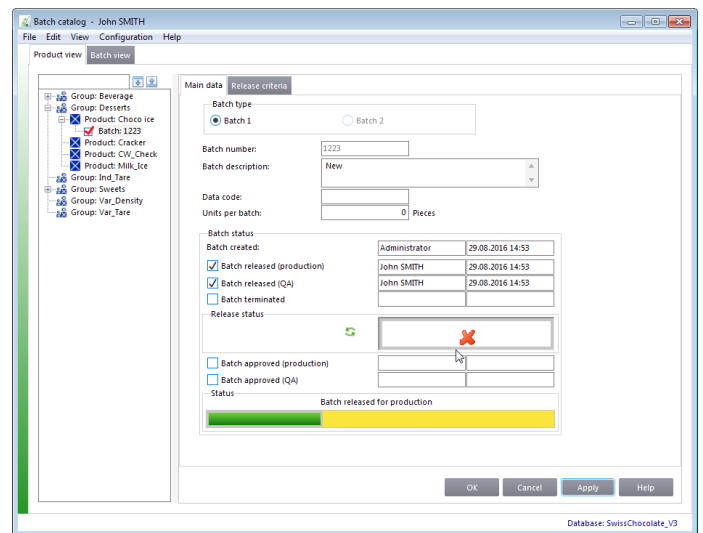
Ideal for customers working with batch oriented processes

– Authorization of batch release in the batch catalogue
– Batch oriented statistics
– Facility for two concurrent batches

METTLER TOLEDO

FreeWeigh.Net®
Release Criteria Module

FreeWeigh.Net® supports batch release decision

A clearly definable set of release criteria in FreeWeigh.Net® supports the decision as to whether a batch may be released for shipment or not.
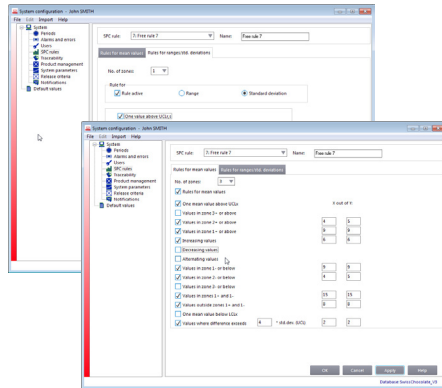

The choice of selectable release criteria includes assessment of quality rating (QR) as well as individual criteria based on sampling and statistics.

Release Criteria summary as well as detailed assessment results

At any stage of the batch processing it is possible to display the current release status of the batch
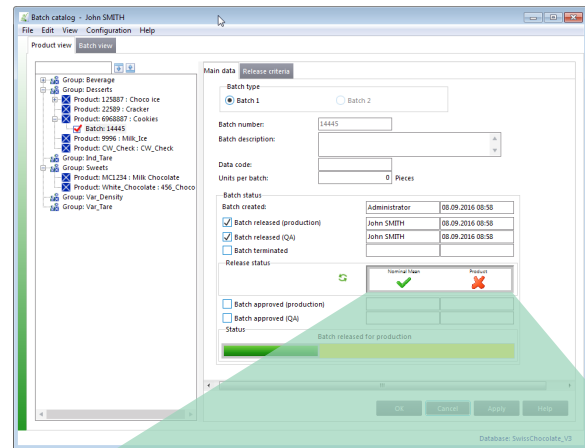– End-of-sample message
– Testplace graphics screens
– Monitoring screens
– Batch catalogue
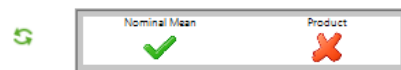
This provides early recognition in the case that a batch tends to become **non-releasable** and permits taking **corrective action** before the batch is finished.

Clearly documented

Batch release status – included in the FreeWeigh.Net® reports – ensures that the produced quality is clearly documented.

Computer aided release decision for production batches

– Definition of criteria for batch assessment
– Clear message whether a batch can be released or not
– Up to three levels of Release Criteria can be defined
– Quick summary in Batch Catalogue and monitoring screens
– Large choice of criteria selectable

METTLER TOLEDO

FreeWeigh.Net®

Attributes & Testplans Module

### Quality attribute data from visual checks and sensory testing

Besides the measurement of physical product data, it is also increasingly important to monitor quality attributes of the product which require visual or sensory assessment by product specialists. Questions, such as correct applied product label, correct product expiry data or good taste, are crucial for the acceptance by the consumer. The results of these checks are entered in preconfigured masks of FreeWeigh.Net®, allowing subsequent graphical representations with bar- or pareto charts. This ensures all encompassing quality control and the base data for clear identification of quality gaps beyond physical variable measuring.

One picture tells more than thousand words

Pictures of good, acceptable and bad examples on the user dialog of the FreeWeigh.Net® Testplace Module allow the user optionally fast visual recognition of the produced quality. With the touch screen optimized software the input is made in a fraction of seconds without having to use mouse or keyboard.
The ideal station for this module is a METTLER TOLEDO PC based and IP69k compliant terminal or a standard personal computer with touch-screen.

Testplans ensure thorough quality control

In order to ensure that all needed quality data is properly collected, the FreeWeigh.Net® Testplace Module can be enhanced with the support of Testplans. Testplans allow you to tie several test items together to a testing sequence. Once a Testplan is started it requests measurements and data input until the sequence is completed. Thus ensuring completeness of data.

foil shifted
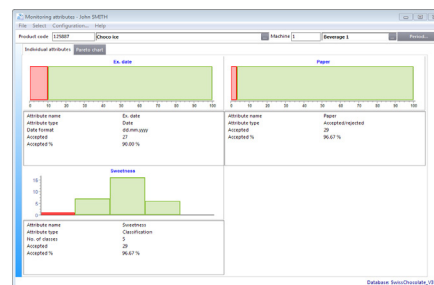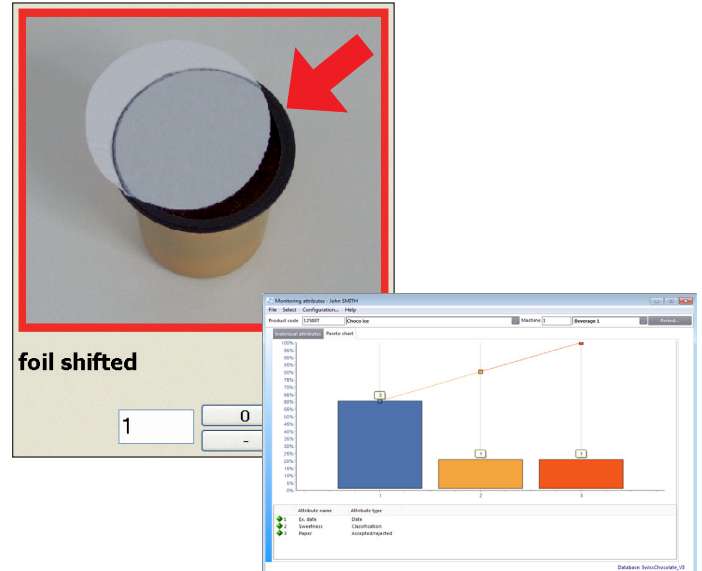
Quality data acquisition on your fingertip!
Visual inspection made easy and efficient!

– Pictures on the screen of your PC terminal for fast recognition of good and bad
– Touch screen optimized data input
– Ensured completeness of quality data
– Quick data acquisition to speed up the process even more
– Testplans to create sequences of measurements and attributed
– Graphical representation with Pareto charts showing the frequency of errors

METTLER TOLEDO

FreeWeigh.Net®
Time Controlled Sampling Module

Full control over the data acquisition rate

The optional Time Controlled Sampling Module permits the definition of a rate of sampling for each test item. In the case of the Testplace module it is possible to have multiple test items controlled by the defined sampling intervals. Due samples generate an on-screen message, from which the sample can be immediately initiated or postponed with the "Dismiss" function. This works on Testplace stations as well as on remote scales.

Visual or acoustic alert for sample due

If Time Controlled Sampling is combined with the Digital I/O option it is possible to combine a due and/or overdue situation with an electric signal, which could drive a warning light or a buzzer. This ensures that the alert for a sample is clearly recognized – even in a noisy environment.

Enforce sampling plan

Time Controlled Sampling enables the definition of the sampling rate together with all other product characteristics and enhances the quality control process with the enforcement of a sampling SOP in accordance with legal requirements.
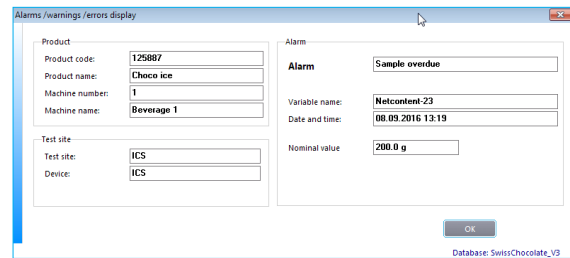
Built-in control of sampling rate with online alert for due and overdue sample

– Definition of sample rate for single test items or for test item groups
– Online warning for due and overdue sample
– Immediate start of sample or dismiss function for later sampling
– Visual or acoustic warning when combined with Digital I/O*

* Requires Digital I/O option

METTLER TOLEDO

Process Improvement

FreeWeigh.Net®
Monitoring Process Module

Simple Overview of Process

The Monitoring Process Module provides important information about the connected FreeWeigh.Net® test sites. Fields on the screen remain green when the situation is under control. These will turn red for alarms and orange for metal detection. Consequently the user of this module has his FreeWeigh.Net® system under complete visual control. If detailed information about a particular product is needed a double-click will zoom into the details.

Fast data drill-down and device status control

The shade of green background of the test sites ensures that it is easy to understand how recently the sample was taken. For this visualization, the green in the Monitoring Process Module fades from light-green to dark-green. Icons at the top of each test site indicate whether the connected devices are online or unavailable.

Complete overview – at a glance!

– Online monitoring
– Quick overview of current activities in each department and filling line,
– Alarms on quality characteristics and number of metal detections
– Fast access to monitoring screens

METTLER TOLEDO

FreeWeigh.Net®

Errors & Interventions Module

Message catalogue for handling instructions

Frequently a product requires special instructions when taking a random sample. In some cases it is necessary to specify how to perform the measurement, in other cases some precautions have to be made (e.g. wearing gloves). FreeWeigh.Net® permits setting up test item oriented messages, which clearly define how the random sample needs to be performed. Once the sample is taken FreeWeigh.Net® is able to display predefined messages indicating whether a random sample was successful or not, defining the next action.

Input of error reason and type of intervention

If a random sample has failed it is crucial to know why. It is also important to know what action the person at the test site has taken in order to solve the problem. Using the FreeWeigh.Net® Errors & Interventions Module it is possible to predefine possible errors and available actions. Thanks to the highly configurable user access control system of FreeWeigh.Net® it is even possible to assign the responsibility for errors and interventions to different individuals. This makes sure that no valuable quality information gets lost.
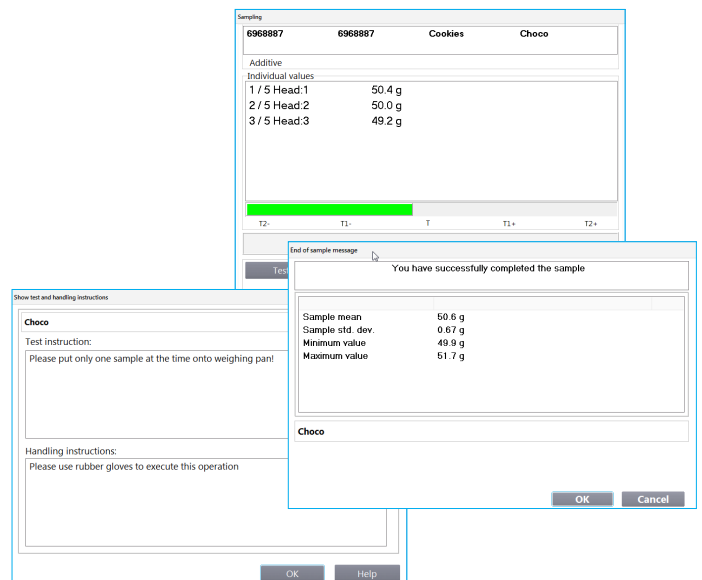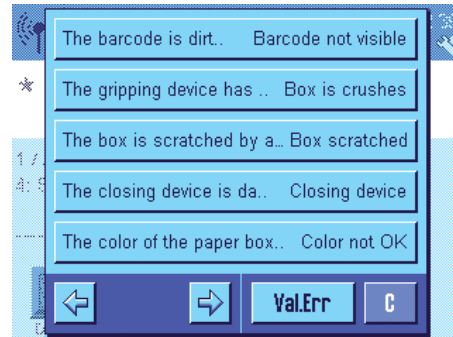
Extend Quality Control with reasons and actions

– Complements thorough quality control with an assessment of why quality problems occur with ″weighting″ according to the seriousness of the failure
– Generates predefined handling instructions for appropriate actions in order to overcome quality problems in production

METTLER TOLEDO

FreeWeigh.Net®
Multihead Statistics Module

Online performance monitoring of individual filling heads

Producing on machines with multiple filling heads is a great advantage to throughput and productivity. As identical products are made with different (sub-)equipment it is important to constantly monitor the performance of each head or nozzle. This is crucial to prevent quality differences and also to recognize degradation or deviation of individual heads early enough to plan maintenance or replacement.

Pin-pointing for individual filling head monitoring

With a simple click it is possible to pin-point on individual filling heads and to compare them online. This function is ideal to monitor critical heads or nozzles.

Graphical matrix representation of individual values

A configurable matrix representation for individual values permits direct comparison of the heads in the shape they are installed in the filling machine.

To analyze trends of individual heads it is possible to simply flip forward and backwards between the sample series. Green, red or orange bullets indicate correct, under- or overvalues of each head.

Great benefit in plastics industry

Matrices are the typical shape of plastics injector molds. Therefore this function is a great benefit when using FreeWeigh.Net® for quality control in this industry.
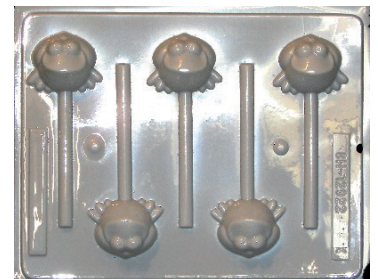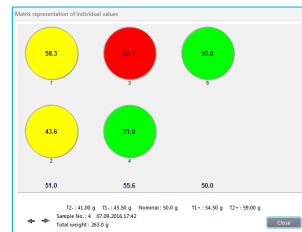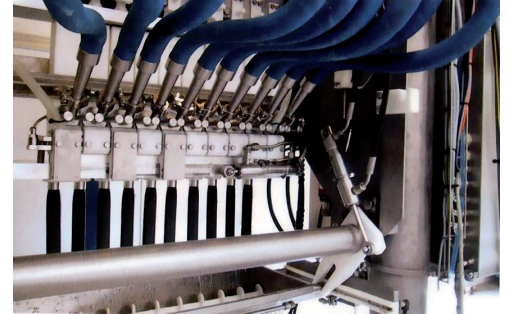
Individual filling head statistics and graphical representation

– Monitors the performance of individual filling heads in multihead machines
– Pin-pointing of individual filling heads in online monitoring
– Graphical matrix display for individual values representing head layout
– Early recognition of filling head or injection mold degradation

METTLER TOLEDO

FreeWeigh.Net®
Free Reporting Module

Define your own report based on statistics or raw data

For many customer the reporting functionality available in the standard version of FreeWeigh.Net® is sufficient. However, sometimes it is required to define a special set of documentation mixing data with graphics, alarms or any other information available in the vast collection of data in the FreeWeigh.Net® database. The FreeWeigh.Net® Free Reporting Module opens a wide field of report configuration including data representation in matrices. Furthermore the Free Reporting Module allows to directly access the raw data from the database and to freely define time periods.

Data pin-pointing and data segregation

While legal reporting requires representation of all collected data, the Free Reporting Module provides a data pin-pointing feature allowing the selection of a particular set of data for a report. Segregation of production phases can easily be realized with Sample Tags, which can be assigned to sample data. All these features greatly enhance the value of the FreeWeigh.Net® reporting, especially in the pharmaceutical industries.

Simultaneous display of related product information in one report

– Activities / alarms
– Combined variable / attribute-samples / statistics
– Variables: mean value, standard deviation, range control charts, histograms
– Attributes: pareto, trend graphic for individual attributes, c-charts, u-charts
– Freely selectable time period
– Data pin-pointing allows filtering of failed samples from the report

METTLER TOLEDO

FreeWeigh.Net®
Test Item Versioning Module

More flexibility without compromising data consistency

If settings in a test item must be changed the FreeWeigh.Net® Test Item Versioning Module allows creation of a new version by keeping all statistics of the old test item version. All raw and statistics data in the old test item versions remain in the data base for later access and evaluation.

Full traceability in validated processes

Validated processes become more flexibility by maintaining clear data segregation and process traceability. Thus pharma production processes are fully documented including the test item settings in different production runs.

Monitoring and reporting on historical data

A configurable matrix representation for individual values permits direct comparison of the heads in the shape they are installed in the filling machine.

Old versions of a test item remain available in the FreeWeigh.Net® Product Catalog in the status inactive. Their history remains fully accessible for reporting and monitoring.
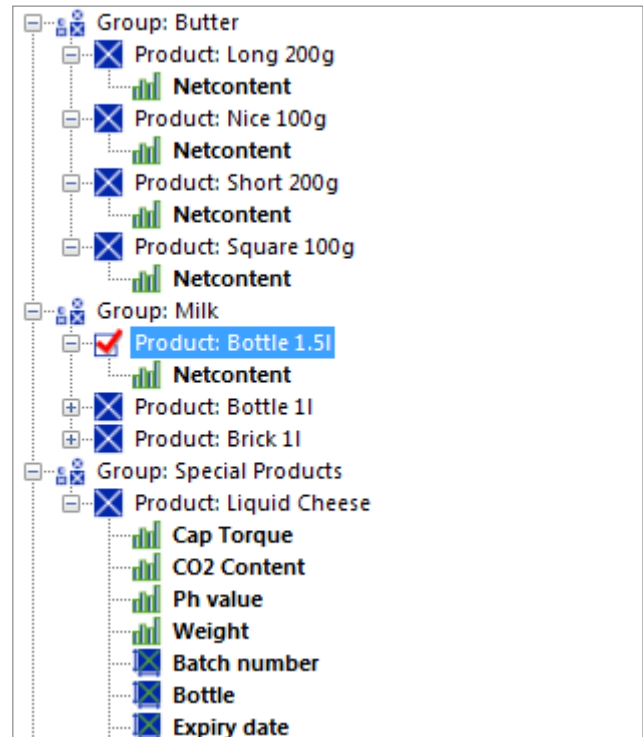
Manage and maintain multiple versions of test items for full process traceability

In a production process it is possible that the parameters of a test item change:

– There are several reasons why a new batch of a particular product may require new settings, such as e.g. nominal, tare or other parameters
– The Pharma production starts in iterative phases with multiple runs followed by adjustments of the fill amount
– The FreeWeigh.Net® Test Item Versioning Module permits full segregation of data from different test item versions and seamless traceability of the test item history
– Display and reporting on statistics for each test item version provides convenient access to historical test item data

METTLER TOLEDO

FreeWeigh.Net®
Audit Trail / 21 CFR Part 11 Module

Use FDA's 21 CFR Part 11 at your benefit

US FDA has implemented 21 CFR Part 11 on request of the pharmaceutical ind-ustry with the target to simplify drug approval, specifically to move away from the huge amount of paper based docu-ments to electronic documents. With 21 CFR Part 11 the electronic documents become the original, while printouts on paper are non-binding copies. Companies wishing to comply with 21 CFR Part 11 will have to implement system support-ing it. One of them is FreeWeigh.Net®. With the Audit Trail / 21 CFR Part 11 Module a major step towards compliance is achieved.

Designed for compliance from beginning

The design and specific functions of FreeWeigh.Net® support companies to fulfill 21 CFR Part 11 compliance require-ments. From the start FreeWeigh.Net® was developed under the stringent rules of GAMP, thus entirely documented and traceable according to the V-Model. Furthermore the specifically implemented functions of the Audit Trail / 21 CFR Part 11 Module permit seamless imple-mentation of FreeWeigh.Net® into a vali-dated and compliant environment.
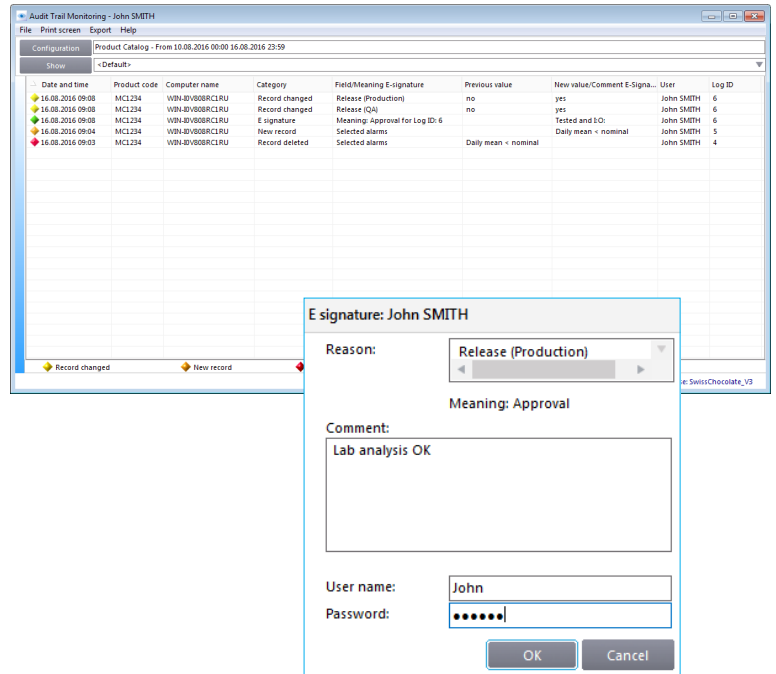
The Audit Trail / Part 11 module provides all necessary functions needed for compliance with the FDA 21 CFR Part 11 regulations.

– Electronic Signatures
– Audit Trail
– User profiles and access control
– Device control

METTLER TOLEDO

FreeWeigh.Net®
Adjustment Algorithms Module

Use the data from random sampling for machine adjustment

The optional Adjustment Algorithms Module in FreeWeigh.Net® automatically generates an adjustment message at the time when the fill quantity deviates from the specified nominal. Two adjustment algorithms are available:
– METTLER TOLEDO proprietary
– Based on CuSum

METTLER TOLEDO proprietary algorithm

This algorithm – according to user selection – considers either 50, 100 or 200 individual values for the calculation of the needed adjustment. The built-in Double T-Test filters scatter of the filling machine. With the configurable minimum adjustment value the adjustment message can be customized for the filling machine.

CuSum algorithm

This algorithm is especially useful when the products are difficult to fill or when short production runs are made. It uses the calculated CuSum and the defined decision line as basis for the adjustment.

Filling

Measurement

Adjustment

Control/Evaluate

+ –
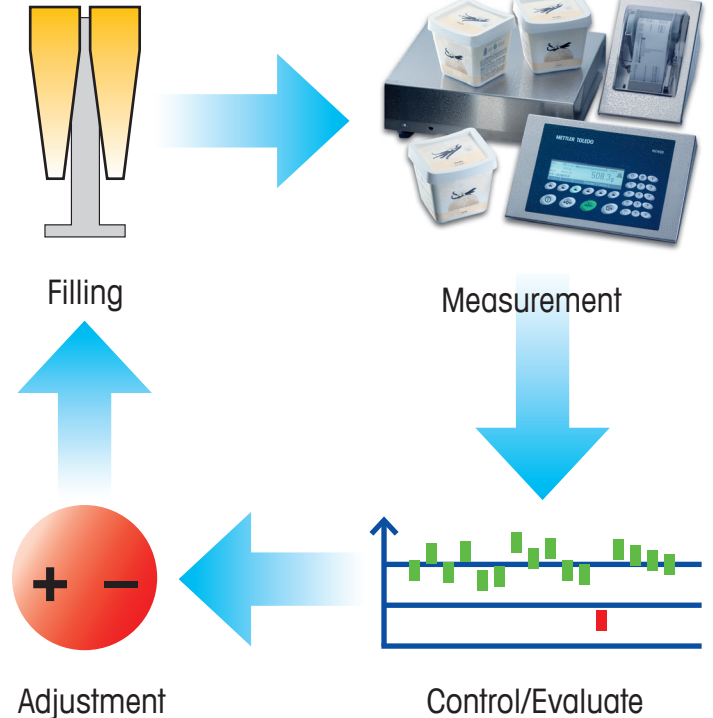
Use quality data for machine adjustment

– Automatic monitoring of overfilling and display of messages for adjustment of the filling head without violation of legal tolerances
– Algorithm evaluates process variation and calculates a configurable adjustment message
– Possibility for closed-loop adjustment feedback to filling machine*

* Requires Digital I/O option

METTLER TOLEDO

FreeWeigh.Net®
SPC Module

Additional trend analysis on the collected quality data

If a user would like to make data analysis beyond tolerance limit checks the SPC Module is the right tool.

Large choice of available rules for standardized process assessment

Apply rules to collected data and calculated control figures and receive system generated information about the stability of your production process.
FreeWeigh.Net® offers a large choice of industry standard rules for Statistical Process Control:
– UCL/LCL Control limits
– Warning limits
– Western Electric
– Nelson (Rule of 8)
– Ford
– Westgard
– Free definable rules

Sophisticated SPC algorithms

Additional powerful algorithms are available to enhance quality control in regard to process capability and monitoring of small deviations. Apply the following process control features to have your process under control:
– CuSum – Cumulated Sum
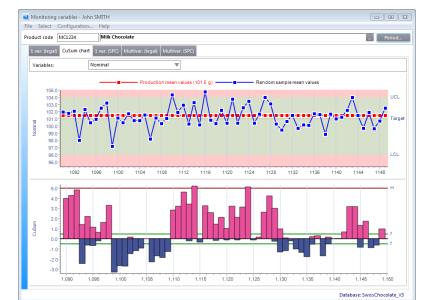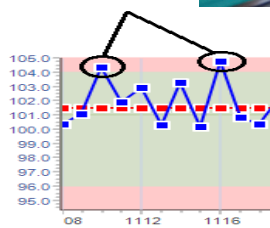– Cp/Cpk – Process capability

FreeWeigh.Net® monitors your process online and alerts you in the case that defined limits – set in the algorithms – are exceeded.

Additional monitoring features

The FreeWeigh.Net® SPC module enables additional advanced monitoring features, such as Kurtosis and Skewness of the Gaussian distribution.

Statistical Process Control for trend analysis and interpretation according to industry standards

Statistical Process Control (SPC) is an effective method of monitoring and documenting a process through the use of objective criteria based on statistical data. SPC indicated when an action should be taken and when not.
The FreeWeigh.Net® SPC module supports this method with a wide range of individual algorithms and rules.

– Control limits and Cp/CpK set clear boundaries of a process variation and alert the user in the case that they are exceeded in order to allow countermeasures
– Predefined industry standard rules apply sets of criteria, which allow process assessment according to recognized standards
– Free definable rules allow own definitions of SPC criteria

METTLER TOLEDO

FreeWeigh.Net®
Digital I/O Module

Digital signal interface for FreeWeigh.Net®

The Digital I/O option allows FreeWeigh.Net® to signal information, such as alarms and events, through electric signals. These signals can be used to activate external devices like lamps, buzzers or to drive inputs of PLCs. Typical applications are automatic sampling requests in combination with the Time Controlled Sampling option or to adjust filling machines when the optional Adjustment Algorithm module is used. Inputs are used to control sampling permissions, to acknowledge alarms or adjustments. Test sites running on the same Device Engine can share the I/O controller. Each Testplace Module requires its own controller.

Wago Ethernet TCP/IP fieldbus controller

As standard Digital I/O supports the Wago Ethernet TCP/IP fieldbus controller 750-841 with a special FreeWeigh.Net® firmware. This controller is directly connected to the Ethernet LAN of the customer and easy to configure thanks to the built-in web server. Different types of input and output modules are available according to the electric requirements of the connected devices.

See also: www.wago.com

4I/O for ID30

Alternatively to the Wago Ethernet fieldbus controller, Test sites with ID30 terminals can be equipped the METTLER TOLEDO 4I/O option.

Ethernet

SQL Server

Wago controller

ID30 with I/O Module

Shared I/O module

Individual I/O module
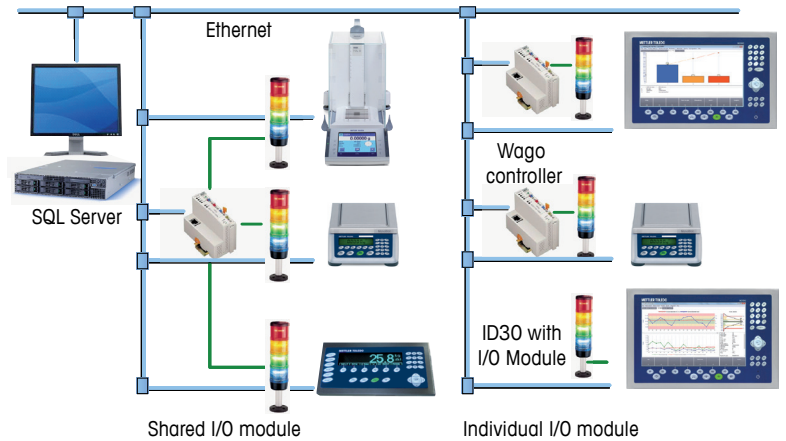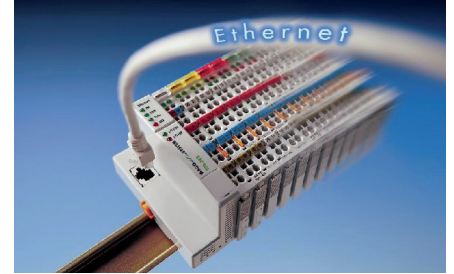
Intelligent interfaces for electric inputs and outputs for signaling and automation

– Wago I/O controllers with built-in Ethernet interface
– One controller for multiple test sites
– Large choice of contacts
– Configuration through the Web-browser
– 4I/O relay box for ID30
– Usable for any kind of signaling device

METTLER TOLEDO

FreeWeigh.Net®
XML Link Module

### Establish communication between FreeWeigh.Net® and other devices

An external device can send random sample data via XML files to FreeWeigh.Net®. The device generates one XML file per random sample. In the XML file the product identification (product, machine, test item), the random sample information (user, batch, container, etc.) and the actual random sample data (individual values) are transmitted.

Exchange data that you need

In FreeWeigh.Net® system, an external XML Link module runs in a background and has the following interfaces:

- **XML input file**: It contains typically product identification, random sample information, random sample data.
- **XML output file:** In case of errors an XML file will be generated. The external application can look up regularly, whether an error occurred. If yes, it can read the XML file and get the reason out of this file.
- **Access to the database:** It allows to get product information, memorize the random sample data and individual values, update the statistics.
- **Messages via Message Kernel:** It allows to report new data and alarms, get information from other modules (like Shutdown) and generate log information in a log file (same as Data I/O).

FreeWeight.Net®
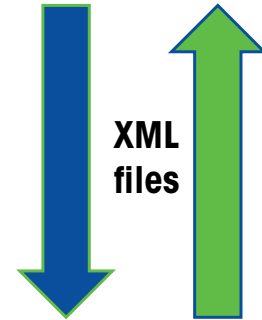
XML files

Any device capable to exchange data over XML files

(incl. weighing devices, customer specific PLCs, automation processes control modules etc.)

Easy connectivity

An external devices are not defined in the peripheral configuration. For this reason, they are also not allocated to machines or products (no allocation needed).

METTLER TOLEDO

FreeWeigh.Net®
Testplace Module

Enhanced user-feedback and convenient operation

The FreeWeigh.Net® Testplace Module is a web-based or PC-based software, which are designed for use on the METTLER TOLEDO Industrial Terminals, a standard PC or any web-browsing capable devices. Ergonomic design of the screen layout makes it especially suitable for use with touchscreen technology.

The FreeWeigh.Net® Testplace module allows control of connected balances and measuring instruments and provides immediate graphical feedback after the random sample is completed. Furthermore it is the ideal equipment to collect attributes quality data (option) and enables use of Testplans (option).

Wide range of connectable devices

As standard the FreeWeigh.Net® Test-place Module allows control of a very large range of METTLER TOLEDO balances, which support the METTLER TOLEDO SICS communication protocol. Non-METTLER TOLEDO balances or measuring devices can be connected by means of the optional FreeWeigh.Net® Device Integration Utility. If the FreeWeigh.Net® Testplace module is used on an ID30 Industrial Terminal it supports also the high precision IDNet weighing platforms, such as KA3s or KA6s.

The convenient – PC based – user interface for samples and Testplans

– Product selection for simple balances
– Convenient design for touch-screen operation
– Applicable to Personal Computers or PC based terminals
– Online graphics for current production
– Customizable help screens in text or PDF format
– Implementation of Testplans*

* Requires Attributes & Testplans option

METTLER TOLEDO

FreeWeigh.Net®

Safeline® Metal Detector Interface

HACCP a key requirement for safety in food and pharma

Having a customer who found metallic parts in the food he bought is a nightmare for every producer. Not only could such an event endanger the life of the consumer, an expensive lawsuit could be the result. HACCP (Hazard Analysis and Critical Control Points) is an error prevention concept, originally defined for the food industry. Metal detection is one of the most important corner stones in this concept, making the metal detector a critical 'physical' control point (CCP) in a factory for consumer products.

Centralized control for Safeline® metal detectors

FreeWeigh.Net® performs the following main functions for connected Safeline® metal detectors:
– Online monitoring and alarming of metal detection
– Recording of metal detection events
– Alarming for due and overdue PVR (Performance Validation Routine)

Contaminant

Makes the metal detector an integral component of a comprehensive quality and safety system

– Supports the implementation of the HACCP concept in factories by FreeWeigh.Net® monitoring the connected metal detectors
– Ensures timely execution of PVRs with online alarms
– Alarms in case metal detection
– Records detection events and the related counter values

METTLER TOLEDO

FreeWeigh.Net®
Data I/O Module

Share data between FreeWeigh.Net® and your ERP system

Many companies maintain important data about their products in their own management computer system. This data – or parts of it – is also the basis for FreeWeigh.Net®. Therefore in order to reduce redundant data and also to automate as many processes as possible it is desirable that FreeWeigh.Net® makes use of the same data set. In addition many customers would like to store quality data created by FreeWeigh.Net® in the management system for further processing for management reporting purposes. The FreeWeigh.Net® Data I/O Module is a very flexible and configurable interface, which automates the exchange of this data. The data transfer takes place by means of a synchronized and shared data file on a common storage or direct by SQL access.

Less errors and cost savings

This configurable interface prevents input errors as data is entered once and then securely transferred between the linked systems. Furthermore it saves considerable time as entire datasets are transferred within fractions of a second instead of tiring re-typing of data.

Host program (e.g. ERP system)

Import / Export module

FWN Data I/O Module

Text file or Database Interface
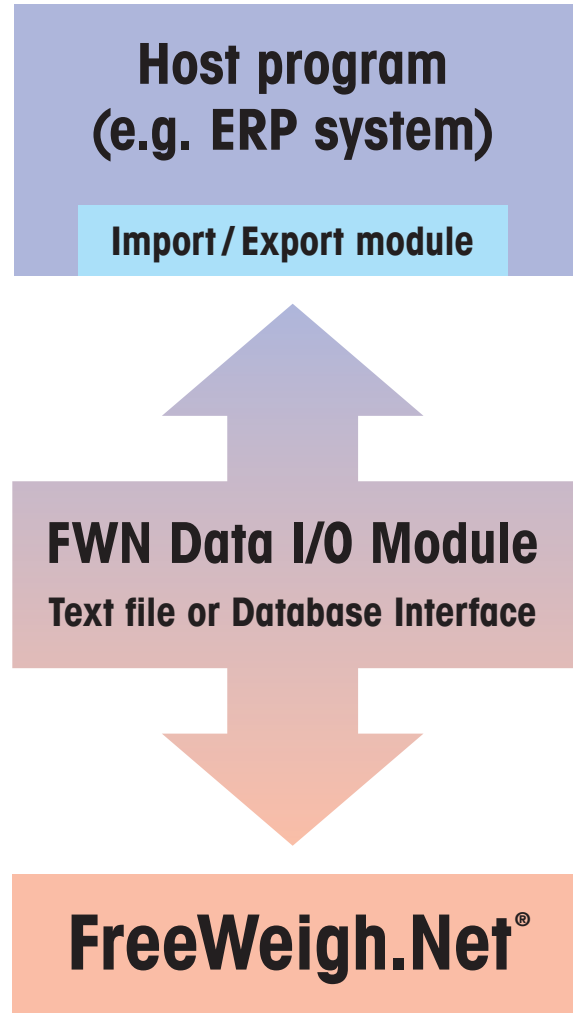
FreeWeigh.Net®

Seamless data import and export between FreeWeigh.Net® and other systems

– Automatic and manual exchange of product data, statistics data, user data, activities log and alarms / warnings
– Data access through text file or database

METTLER TOLEDO

FreeWeigh.Net®
Device Integration Utility Module

Configurable device interface

Many customers wish to connect devices from other manufacturers or METTLER TOLEDO devices for which no dedicated device driver is available in FreeWeigh.Net®. The FreeWeigh.Net® Device Integration Utility is a generic device driver, which can be configured for 3rd party measuring equipment with a communication interface. This permits including these devices into the same data acquisition procedures as supported METTLER TOLEDO devices and enhancing the available quality data and their assessment far beyond the standard.

Sample loop and time controlled sampling

In addition to the manual execution of random samples with Testplace Module, Device Integration Utility provides two important functions for automated data acquisition:

– **Sample Loop** allows automatic collection of data, which is controlled by the connected device. This means that FreeWeigh.Net® receives measurement data unsolicited from the device as it is available.
– **Time controlled sampling** allows the definition of a polling cycle to the connected device ensuring regular measurements at a predefined rate.

High degree of flexiblility

– Allows connection of measurement instruments to FreeWeigh.Net® which are not otherwise supported with a dedicated device driver
– The optional FreeWeigh.Net® Device Integration Utility provides a configurable string parser for devices with communication interfaces (RS232 or Ethernet)
– Enhances FreeWeigh.Net® to complete quality assurance beyond weighing

METTLER TOLEDO

FreeWeigh.Net®
Return on Investment

Parameter	Value	Unit
Cost of raw materials	8.–	EUR/kg
Number of packages produced per day	100'000	Packages per day
Nominal fill quantity	100	g
Number of production days per year	250	Days per year
Production mean value	**101**	**g**
Overfill per package	1	g
Overfill per day	100	kg
Overfill per year	25'000	kg
Overfill cost (=loss) per year	**200'000.–**	**EUR/Year**

Reduced overfill – a simple example

The cost impact of overfilling is directly related to the cost of the raw material. The more expensive the product – the bigger the loss from unwanted giveaways. A producer has to ensure compliance with the product quantity claim, i.e. with net content legislation. On the other hand no producer has an interest to deliver more than this. A simple calculation based on the customer's product helps to show a huge saving potential. Thus also to illustrate how fast the investment in FreeWeigh.Net® turns into real earnings.

Return on investment – Key for the customer

Improved product quality and legal compliance helps a producer to reach the following targets:

– Legal compliance ensures there are no obstacles to successful distribution
– Better acceptance of the products by the end-users
– Optimized production and packaging
– Streamlined and enforced procedures
– Predictable product quality

All of them support the target of guaranteed business success.
FreeWeigh.Net® covers many of these aspects already in the standard.

METTLER TOLEDO