

# Maximized profitability with thorough quality control!

**Flawless and predictable product quality are cornerstones of successful production of consumer products, whether they are food, medicaments or toileteries. To streamline processes, minimize material loss and stay within legal requirements advanced quality assurance tools are needed in order to guarantee consumer satisfaction and to produce under optimum conditions with maximum efficiency.**



Today's consumers are demanding in terms of product quality and price, making them crucial factors for purchasing decisions and subsequently for the success of a product.

Governments and trade-associations issue and enforce laws and regulations about product quality, safety and traceability to ensure fairness in trade and to eliminate risks, which could arise from the usage of any product.

In order to comply with this huge amount of rules and requirements and - in the same time - to be efficient and cost oriented in production advanced tools for quality control are an inevitable must.

### **The right partner for your strategic business decision**

Based on years of experience with quality assurance in all significant producing industries METTLER TOLEDO offers a wide range of suitable solutions, which combine, acknowledge of processes, legal requirements and outstanding equipment to advanced systems providing crucial data for decisions to improve a production while, staying within the boundaries given by the lawmakers.

### **Matching solutions with fast pay-back for any need and system size**

Statistical Quality Control (SQC) systems allow understanding trends in filling processes while production is running. Thus giving the possibility to take corrective action immediately and preventing a production run from being rejected or having to be reworked.

Impacts to production cost are significant and grow proportionally to the cost for raw materials.

### **Optimized net content control in production**

Scale embedded SQC systems are flexible and easy-to-use solutions, which are used to collect data for product net content control. They

provide their statistics on the spot in easy readable reports and fulfill all tasks in order to optimize product fill while maintaining legal requirements.

If an all-embracing solution with centralized data management for distributed data collection is needed METTLER TOLEDO has the right product offering network connectivity to balances, scales, checkweighers, metal detectors and terminals.

### **Compliance to 21 CFR Part 11, IFS or HACCP**

SQC solutions are designed and developed on state-of-the-art technology and in compliance with standards, such as GAMP. They have built-in functionality as required by today's regulations and thanks to continuous product evolution they guarantee longevity of the investment for years.

### **Our solutions make your production more profitable and your products more competitive – thus your company more successful!**

Read more about SQC solutions on page 22–25.

# FreeWeigh.Net®

## Networked quality assurance beyond filling control!

**The networked quality assurance system with virtually no limits in expandability! Statistical Quality Control (SQC) with FreeWeigh.Net® becomes a task as easy as working with any other office application, allowing systematic acquisition of quality data, statistics analysis, documentation and monitoring in a networked and factory-wide quality assurance system.**

This flexible and highly configurable PC-based software system provides powerful functions for data acquisition thanks to the vast range of connectable devices and input possibilities.

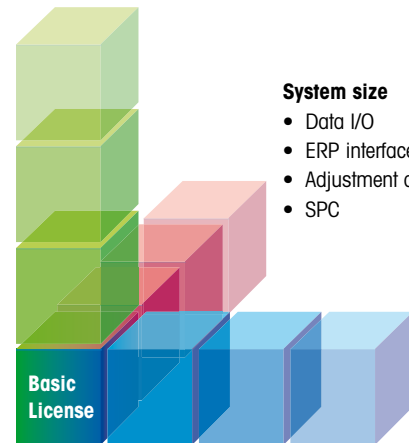
This makes SQC a method far beyond weighing as it enhances data collection and analysis to almost any physical parameter and results from visual product inspection, such as correct "best before date", appearance or proper packing.

The basic license provides a full set of features allowing thorough quality control. Optional modules and connectivity drivers allow gradual expansion and enhancement of the system as it is needed.

The scalability of the software permits tailor made solutions without having to spend money and time for special software development, guaranteeing maximum return on investment and long term value of the system.

### Functionality

- Audit Trail / 21 CFR Part 11
- Batch handling
- Attributes and testplans
- Multihead filling



### System size

- Data I/O
- ERP interface
- Adjustment algorithms
- SPC

### Connectivity

- Balance/scale
- Checkweigher
- Metal detector
- Digital I/O

## Don't miss any important quality aspect!

Compliance with legal net content requirements and optimized fill quantity are important cornerstones of successful production. With FreeWeigh.Net® you are able to go far beyond as it enables you to enhance your quality control to thorough product inspection

including aspects like product expiry date, proper package seals, correct labelling and the HACCP sensitive check for metallic contamination. With FreeWeigh.Net®, nothing is left out and the products leave your factory in a constant and traceable quality, ensuring consumer satisfaction and safety.

Cap torque ok?

Fill level ok?

Label ok?

Expiry date ok?

Batch/lot ID ok?

Net content ok?

Net content

Expire date

Batch/lot identification

Package appearance

Package insert included

Tablet appearance (surface, embossement, color, etc.)

Single and mean weight, thickness, diameter, hardness, friability, disintegration, dissolution

Picture courtesy Schering

Remote weighing station



Monitoring



Planning



MS SQL server



Remote weighing station



Checkweigher



Metal detection



Testplace module with weighing station, tablet tester and dimension measurement



## Harness the process and save money!

**Potential savings in production are countless.**

**Having a process optimized to the limits of fill quantity guarantees compliance with legal requirements and reduces overfill to the absolute minimum.**

Manual reporting is a time consuming and error prone task. Having the measurement data on paper and transferring it to a spreadsheet can take hours where sampling pace is high.

FreeWeigh.Net<sup>®</sup> streamlines the process of data acquisition and makes the rest simple for you without any need of manual action exactly at the moment you want with the advanced reporting functionality.

The user interface of FreeWeigh.Net<sup>®</sup> is designed for easy, efficient and convenient data acquisition. Training costs for the users are low and optional testplans ensure that no data is left out.

Updated statistics are immediately available on all stations after the sample was taken. Online alarms inform about processes, which run out of specification.



This gives you the possibility to intervene while the production is running and to save a batch from rework or even having to scrap it. As all data is stored on the central

SQL database, it only needs a mouseclick to retrieve historical production data for assessment or documented evidence for customers or government authorities.

### FreeWeigh.Net<sup>®</sup> at a glance

- Significant reduction of product overfill cost
- Compliance to legal fill requirements
- Standardized and simplified processes
- Online monitoring and alarming
- Short reaction time in production
- Automated reporting
- Scalable system implementation and enhancement
- ERP integration
- 21 CFR Part 11 compliance functionality
- Validation for regulated environments possible
- Fast ROI

## FreeWeigh.Net<sup>compact</sup><sup>®</sup>

### Get ready to grow!

If you only need one SQC station, but don't want to forgo the convenience and opportunities offered by a PC-based system, FreeWeigh.Net Compact<sup>®</sup> is the right solution.

FreeWeigh.Net Compact<sup>®</sup> is a fully equipped SQC system for one single station, but expandable with optional modules like the networked brother system.

If later distributed data acquisition is needed, METTLER TOLEDO offers an affordable upgrade package.

# SQC stand alone systems

## Professional filling control at minimum cost

If, instead of a number of networked quality inspection stations necessitating centralized data management, a single station for simple filling control is favored, SQC stand alone systems are ideal. The various models can manage 16 to 300 articles, which are defined ready for sampling in no time at all. Mandatory limits are covered by defaults and other tolerances can be entered manually.

To avoid the need for electronic archival requiring compliance with 21 CFR Part 11, sample reports can take the form of customized strip printouts.

This means that PCs are not essential for operating SQC compact systems. However, they may well be a useful adjunct for backing up article list data including related cumulative sample statistics.

## SQC16 – the SQC industrial balances/terminals



<b>Models</b>	<b>BBA462SQC, BBK462SQC, IND469SQC</b>
<b>Capacities (kg)</b>	BBA/BBK: 3 - 35kg IND terminals: analog & ID-Net platforms up to over 100kg
<b>Readability (g)</b>	From 0.01 up to 0.1
<b>Protection</b>	Up to IP69k
<b>Display</b>	Backlit graphic display
<b>Interfaces</b>	3 x RS232, PS/2
<b>Options</b>	Internal calibration weight and internal battery, Ethernet and WLAN interfaces
<b>Accessories</b>	Printers, barcode reader and relay box (LC I/O), PC backup/restore program (BR16)
<b>Applications</b>	SQC and simple weighing
<b>Operation</b>	Menu guided via keypad
<b>Languages</b>	German, English, French, Italian, Spanish, Dutch, Czech, Slovak, Hungarian, Polish and Slovene
<b>Article memories</b>	300
<b>Users</b>	1 balance supervisor and 16 SQC operators or administrators
<b>Special features</b>	<ul style="list-style-type: none"> <li>• 2nd tolerance system for export</li> <li>• Shared statistics for multiple articles</li> <li>• Global density groups</li> <li>• Warnings and adjustment instructions</li> <li>• Backup of article and statistical data on PC</li> </ul>

Please see pages 38–41, 46–51 for further information about BBA/BBK/IND4xx industrial balances and terminals



## SQC14 – the SQC printer

<b>Models</b>	<b>SQC14/16, SQC14/60</b>
	Printer with integrated SQC application and own keypad
<b>Interfaces</b>	LocalCan and RS232
<b>Applications</b>	SQC or simple printing
<b>Operation</b>	Data entered on printer keypad and shown on balance display
<b>Article memories</b>	16 or 60
<b>Special features</b>	<ul style="list-style-type: none"> <li>• Connection of large selection of balances</li> <li>• Operation with LV11 tablet feeder</li> <li>• Pharmaceutical tolerance system</li> </ul>

## SQC-XP – the SQC software for XP balances



<b>Models</b>	<b>XP precision and analytical balances</b>
<b>Capacities</b>	26g – 64kg
<b>Readability</b>	From 0.001 mg up to 1 g
<b>Protection</b>	Up to IP54* (*in use)
<b>Display</b>	Color touch screen display
<b>Interfaces</b>	Standard: 1 x RS232 Option: add. RS232, LocalCan, Bluetooth
<b>Accessories</b>	Tablet feeder (LV11), printers, barcode reader, relay box (LC I/O) and PC, backup/restore program (BRXP)
<b>Applications</b>	SQC, weighing, piece counting, percent weighing, density determination, statistics, formulation, dynamic weighing, differential weighing
<b>Operation</b>	Menu guided via touch screen display
<b>Languages</b>	German, English, French, Italian and Spanish
<b>Article memories</b>	100
<b>Users</b>	8 different users, individually configurable access rights
<b>Special features</b>	<ul style="list-style-type: none"> <li>• Program for installing on any XP balance</li> <li>• 2nd tolerance system for export</li> <li>• Shared statistics for multiple articles</li> <li>• Global density groups</li> <li>• Warnings and adjustment instructions</li> <li>• Pharmaceutical tolerance system</li> <li>• Operation with LV11 tablet feeder</li> <li>• PC data backup and article configuration</li> <li>• Support for A4 printers</li> </ul>

## LV11 – the tablet feeder

For automation of large sample sizes in the pharmaceutical industry

**Interfaces:** RS232, LocalCan

**Accessories:** Doors with opening for XS/XP analytical balances and for Pro draft shield of XS/XP precision balances

Please see page 93 for further details