



IT8000E SQC

Weighing Terminal for Statistical Quality Check

IT8000E SQC is a checkweighing terminal for capture and evaluation of samples in compliance with the regulations for statistical quality checks.

The evaluation method can be selected, either compliant to EC regulations for prepackaged goods or pharmacopeia or with freely chosen limits.

Filling quantities can be checked either by weight or by volume.

IT8000E SQC supports connection of one or two analog or digital scale base of any type.

High resolution and fast signal processing of the **IT8000E SQC** terminal permit precise capturing of samples and fast evaluation.

Checkweighing results of samples and batch are indicated with colored marking on the TFT display.

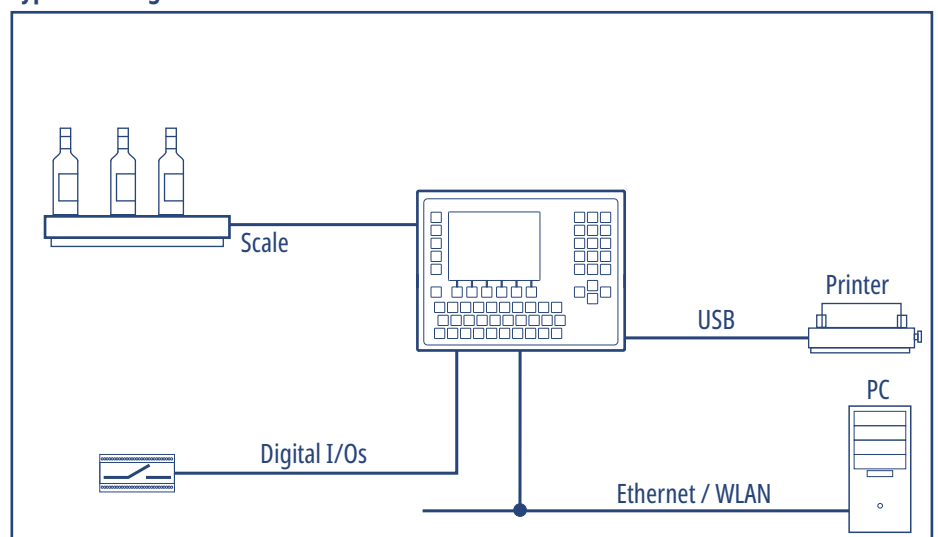
Operator prompting with clearly structured onscreen menus ensures fast and error-free operation and minimum training requirements.

Essential features:

- Product file for up to 250 products
- 3 different check methods: individual, additive or 2-phase with emptying the test object
- Entry of tare weight or tare weighings with calculation of mean value
- A surcharge can be specified for products whose filling quantity may change after checking
- Entry of up to 8 additional acceptance criteria (e.g. 'Label ok?')
- Simultaneous evaluation of samples for up to 50 production lines, also for identical products

- Entry of two additional IDs with assignment to sample (e.g. 'Operator') or batch (e.g. 'Order')
- Output of sample and/or batch results on printer, host system and/or saving to file
- Graphical view of distribution of measuring results (Gaussian distribution) over one or several samples
- Ring buffer for statistics with 2,500 entries, e.g. for the last 100 days with 25 samples per day.

Typical Setting:



Rapid and precise checks

- Fast signal processing with more than 200 updates / sec
- High W&M approved resolution of 6,000 d (digital platforms up to 32,000 d)
- Automatic capturing of weight and tolerance zone when scale is settled
- Automatic allocation of tolerance zones according to selected check method (prepackaged goods / pharmacopeia)
- Tare weighing or calculation of average tare weight.

Simple and secure operation

- Operator is guided on a high-contrast color TFT display
- Data entry is via alphanumeric tactile acid-resistant keyboard or optional full-size PC keyboard.

Capturing of all relevant data

- Comprehensive statistics functions with mean value, standard deviation, number of weighings etc., simultaneous processing of up to 50 batches
- Evaluation by product and/or batch
- Calculation of correction factor for adjustment of feeding device
- Output of check results on printer or PC, print format configurable
- Option to store results in internal memory or on USB stick.

Security

- Power-fail-safe data storage
- Password protection for all data
- Battery-backed realtime clock
- Clear-text display of error messages.

Weighing electronics

- Integrated signal amplifier (1 or 2) to connect up to 16 strain gauge load cells in 4- or 6-wire mode
- Calibration as single or multiple-range and as single or multi-interval scale
- Option to connect Minebea Intec IS platforms or Mettler-Toledo TBrick platforms.

Ethernet interface (option: WLAN)

Integrated Ethernet or WLAN interface, access to internal result file possible via SFTP.

Integrated USB interface (option)

To connect printer, scanner, PC keyboard or to store check results on USB stick.

Electrical connections

110 (–15 %)–240 (+10 %) V AC;
50 / 60 Hz, option: 12–30 V DC,
power consumption max. 20 VA.

Operating temperature

–10 °C (+14 °F) to +40 °C (+104 °F),
max. 95 % relative humidity, non-condensing.

Accessories

- Protocol printer
- Protective dust/splash cover.

Options

Connection to PC program PC SQC for the centralized management of check results and product data.

Ex2/22 version

For installation in Ex zones 2 and 22.

Typical check cycle (check method 'Individual'):

- Choose production line
- For new product choose one from product file
- Enter batch data
- Capture weight when threshold is exceeded and start checkweighing
- Assign captured weight to tolerance zone, enter in statistics file
- Capture next sample until complete
- Display and optionally print result of sample
- On end of batch display and optionally print result of batch
- Next cycle ...

Example for protocol print

```
Line No.15 Product No. 125 Product: .....Crystal Sugar Fine SW. 1.00
Date/Time: 05.05.17 / 15:45 Batch 120009 Sample 1
Ref.Weight 500.0 g Number .....10 -TU2: .....0 Max: 504.0 g
Tare Weight 15.0 g -TU1: .....1 Min: 484.0 g
TU2: 470.0 g Mean Val. 499.7 g -TO1: .....9
TU1: 485.0 g Deviation. 5.533 g -TO2: .....0
TO1: 515.0 g +TO2: .....0
TO2: 530.0 g TU1%: .....10
Result: > 2,5% TU1
```

Construction:

Desk/wall version



- Stainless steel housing, IP69K, NEMA 4X
- Dimension W x H x D: 330 x 239 x 134 mm (13.0" x 9.4" x 5.3")

Panel-mount version



- Stainless steel housing, fascia plate protected to IP69K, NEMA 4X
- Dimension W x H x D: 285 x 224 x 69 mm (11.2" x 8.8" x 2.7")
- Cutout in panel: 268 x 207 mm (10.6" x 8.1")

Display / operation:

Result of sample weighing

W1	Max 1500 g	end= 0.5 g
	Min 10.0 g	
W1	0.0 g	
Tare	0.0 g	
Batch	A2015-0067898	Machine 14
Product	102101 Sour cream	
Last Chk.	22.12.2015 14:33:08	
Sample	1	Checks 8 Scale 1
Nominal	250.0ml	Density 1.02000g/ml
Average	251.6ml	<TU1 0 >TO1 0
Dev.	2.985ml	<TU2 0 >TO2 0
Result	OK	
Sample	Details	Tare Batches Print -->

Display of sample data with colored marking of result

Batch result

Gaussian distribution of samples				
Time	06.10.2015 15:50:31			
Batch	A2015-0090838	Machine	17	
Product	100128 Yoghurt, plain, 125g			
Average	125.9g	<TU1 1	>TO1 0	
Nominal	125.0g	<TU2 0	>TO2 1	
Total	8			
	114.0	119.5	125.0g	130.5
				136.0
				Return

Display of Gaussian distribution of a product over several samples

Directives: 2014/30/EU, 2014/31/EU, 2014/35/EU

Standards: EN 45501, OIML R 76-1, EN 61000-6-2, EN 61000-6-4, NAMUR NE21, EN 62368-1, OIML R 51, OIML R 61, OIML R 107, WELMEC 6.4 (Annex 2)

CE EU Type-examination Certificate as non-automatic weighing instrument

NMI Certified in accordance with WELMEC 6.4, Annex 2

NTEP NTEP approval as indicating element

ETL ETL certified in accordance with UL 62368-1 and CSA C22.2 No. 62368-1

FC EMI compliance with FCC Part 15

Canada Measurement Canada: Approval as indicating element

UK CA Type-examination Certificate as non-automatic weighing instrument

EtherNet/IP
PROFI
NET
PROFI
BUS