

QC050

QUALITY CENTER FOR CONTAINERS

DESCRIPTION



The QC050 Quality Center is designed for testing of large products, typically ranging from 5L (1 gallon) onwards. This all-in-one system combines leak testing, check weighing and various scrap detections.

CONCEPT

Containers are introduced automatically from the conveyor to the leak testing position.

After triggering the photo-electric switch, the test head comes down to pressurize the container.

Delta Engineering's powerful proprietary leak test algorithm then analyses the pressure decay over time to detect any leaks.

Depending on the selected options, bad or good containers (positive ejection) can be ejected from this position. Good containers proceed to the check weighing position for an inline weight check.



STANDARD FEATURES AND OPTIONS

Standard features include:

- PLC controlled environment
 - o Graphical user interface with intuitive touch screen
 - o Real-time monitoring of the pressure trend graph
 - o Recipe library for efficient changeovers
 - o On-screen extended test results and information
- **Quality Center test**
 - Pressure decay leak test using Delta Engineering's proprietary algorithm
 - Inline continuous weight checker

Optional features:

- Virtual test leak
 - Introduce a simulated leak into the system allowing for periodical calibration
 - Facilitate the leak test setup with new products
- Blocked bore control
 - Mechanical sensor detects obstructions in the neck
 - Prevents problems on the filling lines afterwards
- Scrap detection
 - Photo-electric sensor detects scrap typically in handle and other inclusions
- Handle width control
 - Mechanical sensor detects whether the handle has been fully blown
- Ethernet connectivity
 - Network monitoring, supervision and data logging
- 1000mbar sensor
- Extruder feedback
 - Continuous monitoring of data collected by the weight checker analyses optimal extruder settings which are pushed to the extruder. Saving lots of material....
- Additional integrated conveyor for positive ejection of good containers
- Data logging on Compact Flash memory card
- Positive ejection, avoids errors in production



ADVANTAGES

- Short change-over times between products
 - Recipe library for test leak algorithm settings
 - Single mechanical adjustment of test head height
- Simple operation and clear overview of test results

GENERAL SPECIFICATIONS

Powder coated welded steel frame (RAL7032) Frame

Aluminum frame/profile, flat belt conveyor Conveyor

Dimensions

Height minimum 2400mm - maximum 3100mm

(depending on bottle height and infeed height conveyor)

1650mm Width

(total width excluding conveyor)

Depth 880mm

Weight 450kg - excluding options

Accuracy

✓ Balance 1g in 0-3 kg range, to be calibrated

✓ Leak tester To be checked on our online tool, depending on speed & volume

Max product height 600mm (23.6") Max product diameter 300mm (11.8")

Air supply 14" connection, max 10bar (145PSI), 6bar (87PSI) recommended

Supply voltage 200-240VAC - 16A - 50/60Hz

Control board

Main controls Omron Graphical user interface Omron