



SOMEX
... INNOVATION

Roburst

AUTOMATIC PRESSURE TESTER FOR GLASS BOTTLES

BENEFITS

- Universal bottle handling & clamp
- Constructed entirely from 'off the shelf' components
- Low life cycle cost *

FEATURES

- Automatic bottle height adjustment
- Modular construction **
- Single bottle cullet isolation

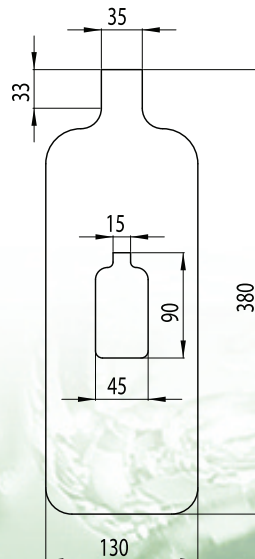
OPERATOR INTERFACE

- Easy to use touchscreen
- Language localization
- Password protection



SPECIFICATION

- Max pressure > 80 Bar (56 Bar 1 Min. equiv.)
- Accuracy: +/- 1% FS
- Container Height: 380mm
- Diameter: ID 15mm - OD 48mm



A highly efficient & reliable device to pressure test Glass bottles & containers, located 'in line' or 'at line' the Roburst is ideal for continuous quality monitoring.

*Low life cycle cost:

There is no 'black box' technology used in construction of Roburst, all components are sourced 'off the shelf' and readily available independently from their manufacturers.

Low cost consumable spares e.g. Neck Seal \$7.00 & Water Filter \$9.00.

** Modular construction:

The Roburst unique design comprises 3 modules: Turret assembly
Electrical Cabinet
Frame

When using Roburst your Automatic Pressure Tester no longer reaches 'end of life' we simply replace the Turret Assembly (which includes all the moving parts) at your site, a more cost effective way instead of replacing the entire machine.

Equivalence:

Roburst has been validated and is used by most of the leading Glass container manufacturers. It complies with the requirements of ASTM C147 & ISO 7458. The pressure test cycle & results have been validated as equivalent to other Automatic Pressure Testers on the market.

TECHNICAL INFORMATION

1. BASIC MACHINE FUNCTION AND DESCRIPTION:

Roburst is designed to pressure test Glass bottles. Typically used 'on line' (Automatic) or 'at line' (Semi Automatic), at Glass container manufacturing facilities.

The Roburst uses precise state of the art measuring and control systems to reflect accurately the actual pressure of glass specimens. Various ramp and dwell profiles can be created and stored in the machine memory. The control system also holds an easily used routine for pressure calibration. This can be used for periodic machine calibration and is easily performed by the user.

2. OPTIONS AVAILABLE:

The Roburst is available in 2 Configurations:

Automatic: connected to customers production line for direct transfer of bottles for test.

Semi Automatic: feed conveyor not connected to production line (bottles loaded to conveyor by hand).

3. SUMMARY OF TECHNICAL SPECIFICATION:

Accuracy:	< 1% Full Scale
Compliance ASTM C147 & ISO 7458	YES,
Maximum pressure capacity:	> 80 Bar (56 Bar 1 minute equiv.)
Neck clamping system:	Yes
Neck sealing:	Dynamic, self compensating.
Neck holder:	Self Centring or Insert style (no tooling required).
Finish diameter:	Up to 40mm
Min. / Max. bottle height:	90mm / 380mm
Min. / Max. bottle diameter:	45mm / 130mm
User Interface:	Touch screen
Cavity correlation:	Yes (numeric, automatic or programmable).
Results:	RS232 Serial or Ethernet TCP/IP Socket.
Units:	BAR, psi, Kg/cm ²
Language selection:	Available in English/German/Spanish/Portuguese /Italian
Remote Diagnostics:	Yes (requires connection to Network port with Internet, RJ45)
Calibration:	Easily calibrated by user.
Wash down after test:	Yes, user selectable
Cullet collection:	Vibration unit or Bin
Single cullet collector:	Yes (optional)
Dimensions:	87 x 120 x 194 cm's
Net weight:	350 Kg's
Compressed Air:	5 -6 BAR 200L/Min.
Electrical Power:	Single Phase 110V 50/60Hz, 13A, utility supply
Water supply:	2 -5 BAR pressure, <250 ppm Calcium Drain:
Water Drain:	Connected to Conv/Vibration unit or Cullet Bin.



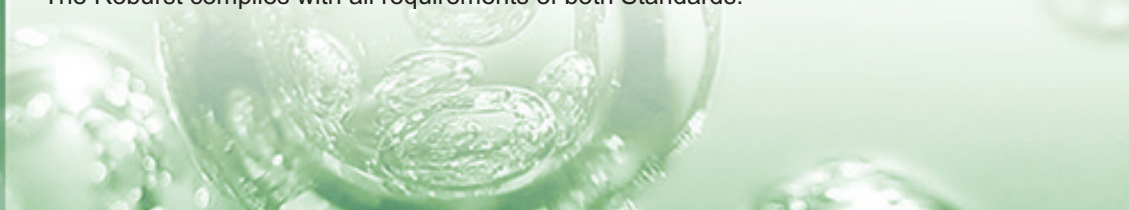
4. COMPLIANCE OF ROBURST WITH REQUIREMENTS OF TEST STANDARD:

The standards most commonly used for performing Glass burst tests are:

ASTM Standard C147-86 Internal Pressure Resistance (Hydrostatic): Glass

ISO 7458 Internal Pressure Resistance of Glass Containers

The Roburst complies with all requirements of both Standards.



5. MODULAR ASSEMBLY:

5.1 Electrical Cabinet:

The PLC, motor drives, safety circuit, relays etc are all housed in the Stainless Steel electrical cabinet. Extensive use multi blocks minimises the cables from the cabinet. All components are sourced 'off the shelf' from industry recognised suppliers e.g. Allen Bradley, Weidmuller, ABB etc. all wires are numbered. A cooling unit can be integrated into the cabinet (optional).

5.2 Turret assembly:

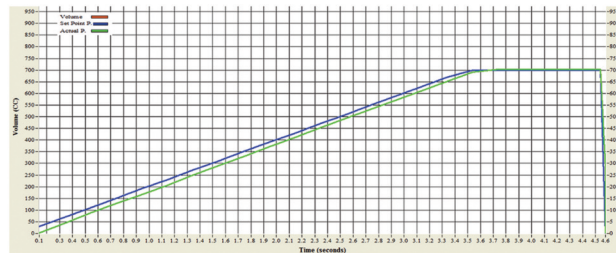
All actuators and moving components are mounted on 1 turret chassis plate; all sourced from Festo & SMC, all hoses to actuators are tagged at either end. The entire turret assembly can easily be removed from the machine



5.3. Frame:

The frame is fabricated from high grade welded Stainless Steel, panels are easily removed to give access to electrical & mechanical components.

Pressure is generated using compressed air as the source. The 5 BAR compressed air supply is multiplied x 20 to achieve the required >80 BAR test pressure. Pressure of the test specimen is measured using an industrial grade 100 BAR pressure transducer with an accuracy of +/- 1% of full scale.



A proportional valve continuously monitors the actual vs. the set pressure. Leaks at the seal between the bottle and the pressure head are prevented by using pressure multiplication this also ensures excessive stresses are not applied to the neck of the bottle.

6. PRESSURE GENERATOR:

7. CALIBRATION:

An easily used Calibration routine can be accessed by the operator. Choosing 2 points on the scale the Roburst can be calibrated by the user in less than 1 minute.

8. LEAK OR LOW PRESSURE BURST:

Differentiating between a leak and a burst bottle at low pressures can be challenging, the Roburst controller interrogates the test sequence to distinguish between mechanical/handling failure or poor quality container.

7. OPERATOR INTERFACE:

Roburst uses a rugged 12.1" Panel PC, layout is intuitive and easily understood, with the use of symbols rather than text where possible. Text has been translated to several languages.

