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

*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.

Equivelance:
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.

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.
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:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy:</td>
<td>&lt; 1% Full Scale</td>
</tr>
<tr>
<td>Compliance ASTM C147 &amp; ISO 7458</td>
<td>YES,</td>
</tr>
<tr>
<td>Maximum pressure capacity:</td>
<td>&gt; 80 Bar (56 Bar 1 minute equiv.)</td>
</tr>
<tr>
<td>Neck clamping system:</td>
<td>Yes</td>
</tr>
<tr>
<td>Neck sealing:</td>
<td>Dynamic, self compensating.</td>
</tr>
<tr>
<td>Neck holder:</td>
<td>Self Centring or Insert style (no tooling required).</td>
</tr>
<tr>
<td>Finish diameter:</td>
<td>Up to 40mm</td>
</tr>
<tr>
<td>Min. / Max. bottle height:</td>
<td>90mm / 380mm</td>
</tr>
<tr>
<td>Min. / Max. bottle diameter:</td>
<td>45mm / 130mm</td>
</tr>
<tr>
<td>User Interface:</td>
<td>Touch screen</td>
</tr>
<tr>
<td>Cavity correlation:</td>
<td>Yes (numeric, automatic or programmable).</td>
</tr>
<tr>
<td>Results:</td>
<td>RS232 Serial or Ethernet TCP/IP Socket.</td>
</tr>
<tr>
<td>Units:</td>
<td>BAR, psi, Kg/cm²</td>
</tr>
<tr>
<td>Language selection:</td>
<td>Available in English/German/Spanish/Portuguese/Italian</td>
</tr>
<tr>
<td>Remote Diagnostics:</td>
<td>Yes (requires connection to Network port with Internet, RJ45)</td>
</tr>
<tr>
<td>Calibration:</td>
<td>Easily calibrated by user.</td>
</tr>
<tr>
<td>Wash down after test:</td>
<td>Yes, user selectable</td>
</tr>
<tr>
<td>Cullet collection:</td>
<td>Vibration unit or Bin</td>
</tr>
<tr>
<td>Single cullet collector:</td>
<td>Yes (optional)</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>87 x 120 x 194 cm’s</td>
</tr>
<tr>
<td>Net weight:</td>
<td>350 Kg’s</td>
</tr>
<tr>
<td>Compressed Air:</td>
<td>5 -6 BAR 200L/Min.</td>
</tr>
<tr>
<td>Electrical Power:</td>
<td>Single Phase 110V 50/60Hz, 13A, utility supply</td>
</tr>
<tr>
<td>Water supply:</td>
<td>2 -5 BAR pressure, &lt;250 ppm Calcium Drain:</td>
</tr>
<tr>
<td>Water Drain:</td>
<td>Connected to Conv/Vibration unit or Cullet Bin.</td>
</tr>
</tbody>
</table>

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.

6. PRESSURE GENERATOR:
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.

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.

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.