

Product Information Sheet

Automatic TQ Lab



The Automatic TQ Lab is a fully configurable system capable of measuring Thread, Body, Thickness, Internal Diameter, Top Load, Volume, Weight and Burst Pressures.

Key Benefits

- › Worlds only Fully Automatic Bottle Inspection Laboratory
- › Providing over 8,000 measurement data points across the full range of Dimensional and Destructive module options
- › All required inspection features completed in one system, reducing testing time, equipment requirement and floor space
- › GaugeXplorer operating system, enables fast part program generation completed on the gauge, Industry Standard and programmable features can be renamed to local measurement feature requirements at customers facility
- › CSV data output and flexible formatting for input in to local data handling/control systems at customers facility
- › Remote support package, which includes automatic gauge monitoring and reporting back to Torus for proactive response
- › Measurements traceable and certified to UKAS standards, with internal Torus annual calibration recall system, for continued measurement assurance
- › Configurable conveyor options, for batches of up to 50 components, with interchangeable pallet options specific to the customers bottle portfolio

Technical Specification:

Component Materials	PET, PP, TRITAN, PEF, HDPE
Component Neck Finish	Thread, Continuous thread, split thread, PCO, SP, ROPP, Snap, Clinch
Component Shapes	Round, Round with petals, Oval, Square, Non-Symmetrical, Off-centre neck
Component Height Range	80 - 400 mm
Component Gripper Pickup Height	75 - 395 mm
Component Outer Body Dia. Range	Ø 15 - Ø 160 mm
Component Internal Neck Dia. Range	Ø 15 - Ø 45 mm
Component Outer Neck Dia. Range	Ø 18 - Ø 54 mm
Component Weight Range	5 - 3000 g



POWER
100-240 Volts /
50-60 Hz



WATER
1-2 BAR / 60-120ppm /
0.2mS-0.8mS



COMPRESSED AIR
6 bar / 87 PSI



DIMENSIONS
(W) 2930mm x (H) 2280mm
x (D) 2020mm



Click [here](#) to
view the video

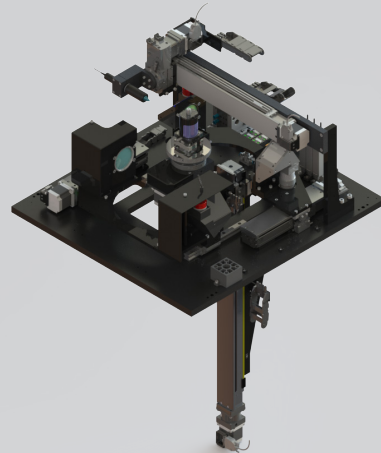


Customise your Gauge

1

B302 - Thread, Body and Thickness Module (Optional)

- » **Non-Contact Integrated Dimensional and Thickness Module**
- » Automatic Thread Start Alignment Routine
- » Automatic Body Alignment Routine
- » Industry Standard Neck Diameters & Heights
- » Programmable Neck Diameter & Heights
- » Programmable Body Diameters & Heights
- » Programmable Body Panel Length
- » Min & Max Form & Diameter Body Diameters
- » Shoulder Diameter & Heights
- » Perpendicularity to Sealing & Base Surface
- » Panel Deviation (Bulge)
- » Overall Height & Base Clearance
- » Concentricity & Linear Distance Capability
- » Wall, Shoulder, Base & Standing Thickness
- » Thickness Sensor Options 0.04 – 8.00mm
- » Thermal Stability Capability
- » Over 7000 Measurement Data Results Per Bottle

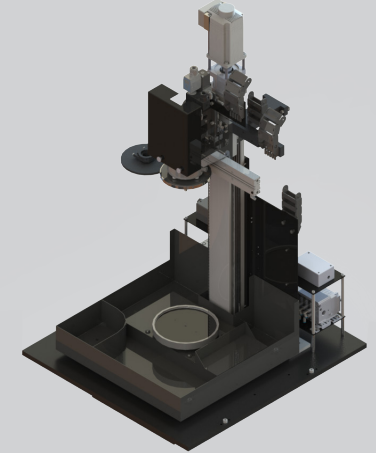


Also available as: Semi-Automatic B302 Gauge

2

B304 - Load, Volume and Weight Module (Optional)

- » **Integrated Load, Volume & Weight within one Module**
- » Automatic top of finish (TOF) locator routine
- » Top Load completed wet or dry
- » Wet Top Load completed in cycle with volume
- » Load at 'X' Deflection Distance Capability
- » Deflection Point Measurement
- » Brimful (Overflow) & Fill Height Volume
- » Vacuity Measurement
- » Empty Bottle Weight
- » Water Temperature Compensation System
- » Adjustable test speeds up to 510mm / min
- » Adjustable deflection up to 10.0mm
- » Scan until dip test functionality for reduced cycle time
- » Continuous Water Pressure Monitoring System
- » Hard & Soft Water Management Packages

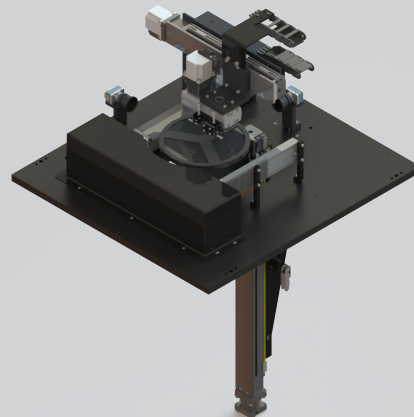


Also available as: Semi-Automatic B304 Gauge

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B309 - Internal Diameter Module (Optional)

- » **Non-Contact Integrated Internal Diameter Module**
- » Automatic Bottle Locator Routine
- » Internal Diameter Depth Position Selectable
- » Up to 10 Internal Diameter Depth Measurements
- » Programmable number of rotation position measurements
- » Vertical Internal Bore Scanning Capability

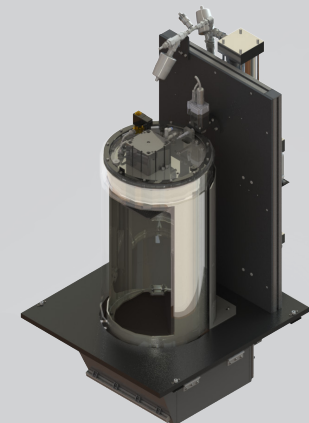


Also available as: Semi-Automatic B309 Gauge

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B303 - Bottle Burst Module (Optional)

- » **Integrated Bottle Burst Module**
- » Burst Presssure
- » Expansive Volume & Percentage
- » Yield Point Pressure & Volume
- » Pressure Hold Out Functionality
- » Test Time Functionality
- » Programmable Ramp Pressures
- » Programmable Ramp Speeds
- » Programmable Pressure Hold Periods
- » Burst Mode Option for fast cycle times
- » Live graphical display screens for Pressure vs Time vs Volume
- » Continuous Water Pressure Monitoring System
- » Water Management & Filter Control System

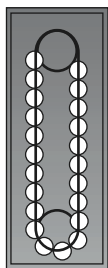


Also available as: Semi-Automatic B303 Gauge

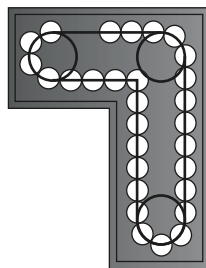
Customise your Gauge

Our modular gauge setups are unique and allow you to customise your gauge, giving you the flexibility to ensure you have a total quality solution.

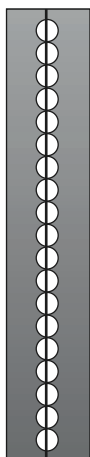
Add your **conveyor**...



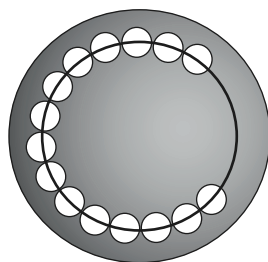
Standard Conveyor -
20 pallet conveyor



L-Conveyor -
30/40/50 pallet options



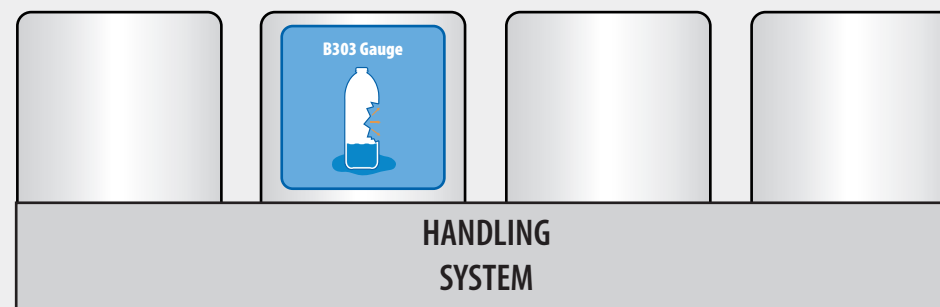
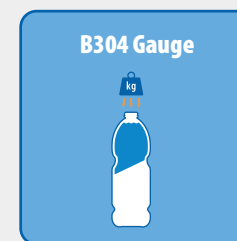
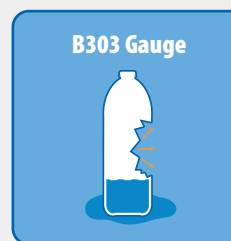
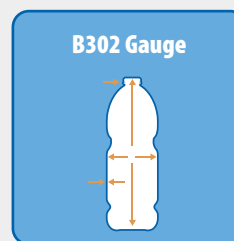
In-Line System -
Auto load conveyor



Index Conveyor

Choose from a range of conveyor options, and finally choose your modules (a minimum of a 2 station configuration through to a maximum of 4).

Choose your **modules**...



2-4 Station Configuration

Handling is **automatically configured**