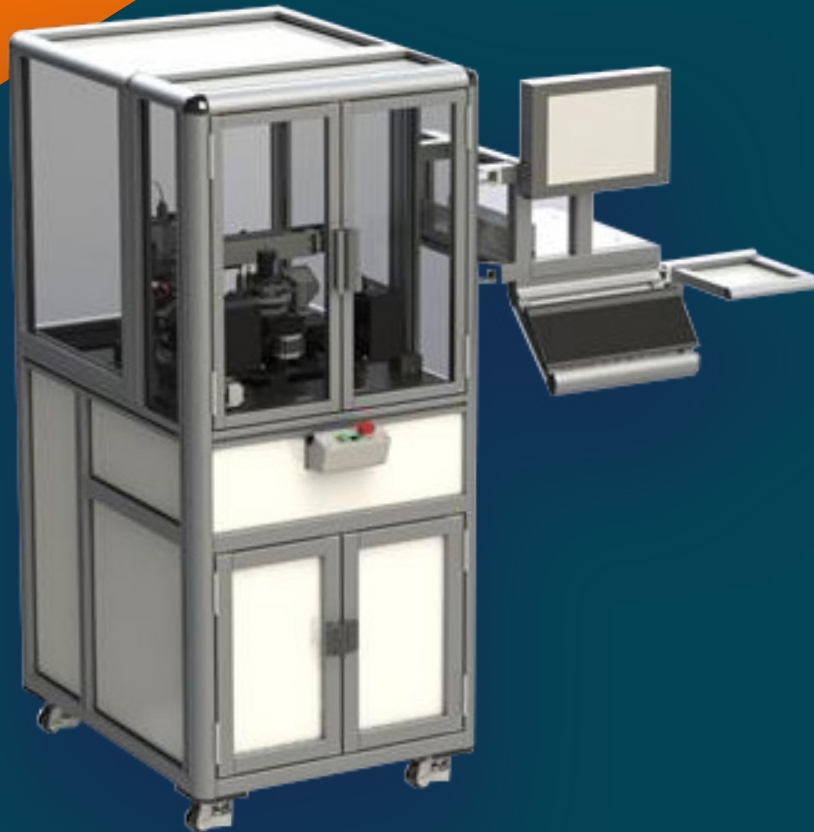




Semi-Automatic Thread, Body and Thickness Inspection Gauge

B302

Semi-Automatic Thread, Body and Thickness Inspection Gauge

The B302 Semi-Automatic Thread, Body and Thickness Inspection Gauge is unrivalled in non-contact dimensional inspection equipment for plastic containers.

The gauge integrates the measurement functions from Torus' B300 Thickness Inspection Gauge and extends the capability of the B301 Optical Inspection Gauge in one system.

Interchangeable location tooling provides the capability to measure small vials to large containers within one platform, future production proofing the machine.

Automatic thread start alignment

Automatic thread start and body alignment options are used to offer unmatched measurement and system repeatability.

Reporting options such as standard CSV or Statistical Process Control (SPC).

Certification to UKAS Standards.

Benefits:

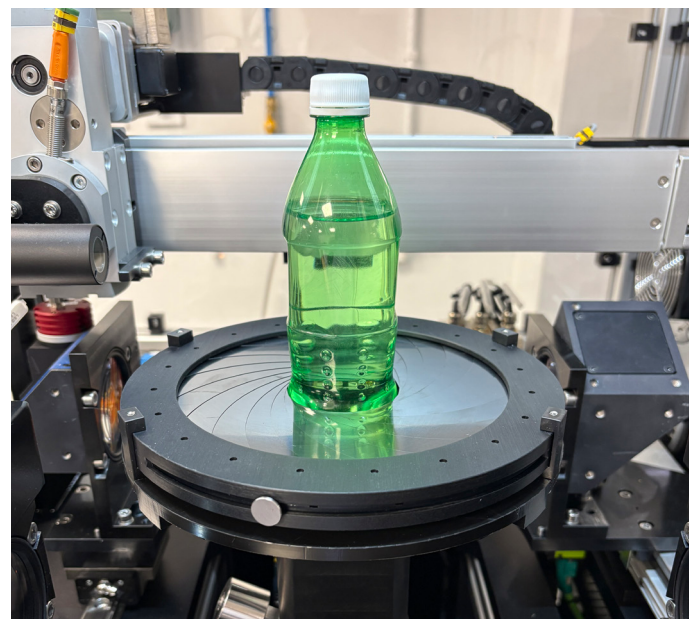
- Over 7000 measurement data points per bottle
- Quick-snap pre-programmed industry standard neck features
- Programmable neck features for full measurement flexibility
- Programmable body features, including dynamic rotational search functionality with max. and min. form and diameter features, perfect for minor, major and pinch diameters
- Single sided thickness measurement
- Thickness sensor can be configured
- Automatic thread start alignment
- Automatic body alignment
- Self-teach profile scan function
- Filled and sealed thermal stability capability

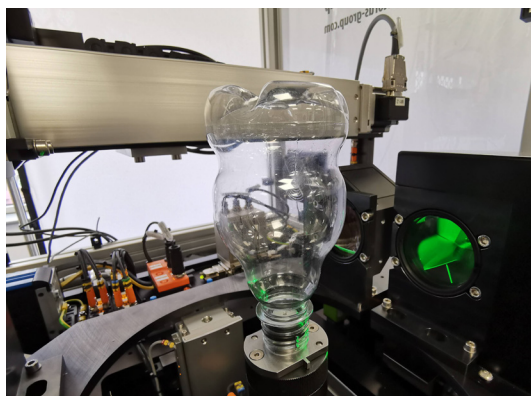
Understanding Thermal Stability: Measuring PET Bottle Creep

Carbonated beverages put real stress on nonrefillable (NR) plastic bottles, and that stress builds over time. As temperature and pressure work on a bottle throughout its life, the plastic can gradually deform. This is known as creep, and it's more than a cosmetic problem: as creep sets in, fill level drops, package appearance suffers, and your bottle may no longer fit properly into carrier shells, shelf displays, or vending machines.

Our new Plastic Bottle Thermal Stability Test gives you the tooling to measure dimensional change in your PET bottles once filled and capped, helping you understand how temperature and pressure stresses affect your bottle during its life. We're working towards a full before-and-after capability, so you'll soon be able to compare filled measurements directly against the empty bottle's original design specification for an even clearer picture of deviation.

This tooling is available as an optional extra alongside the Torus B302 Semi-Automatic Thread, Body and Thickness Inspection Gauge, giving R&D and quality experts across rigid filling more ways to validate PET bottle performance against strength, pressure, and durability demands.





A wide range of plastic containers covered

Measurement Features:

Neck Diameters	T, E, Z, B, B1, A, F, G Programmable neck diameter Accuracy: ± 0.030 mm
Neck Heights	S, K, X, H, M, D Programmable neck heights Accuracy: ± 0.030 mm
Body Diameters	Programmable body diameter Accuracy: ± 0.050 mm
Body Heights	Programmable body heights Accuracy: ± 0.050 mm
Perpendicularity	Angle/Distance
Wall Thickness	Up to 3000 measurements Accuracy: ± 0.020 mm
Base Thickness	Up to 3000 measurements Accuracy: ± 0.050 mm
Standing Thickness	Petaloid bottle stand point Accuracy: ± 0.050 mm
Bottle Height	Individual/Average Accuracy: ± 0.100 mm
Base Clearance	Individual Accuracy: ± 0.100 mm

Thickness Sensor Options:

Low-Range Sensor	0.04 mm - 0.70 mm
Mid-Range Sensor	0.12 mm - 2.50 mm (standard)
High-Range Sensor	0.35 mm - 8.00 mm

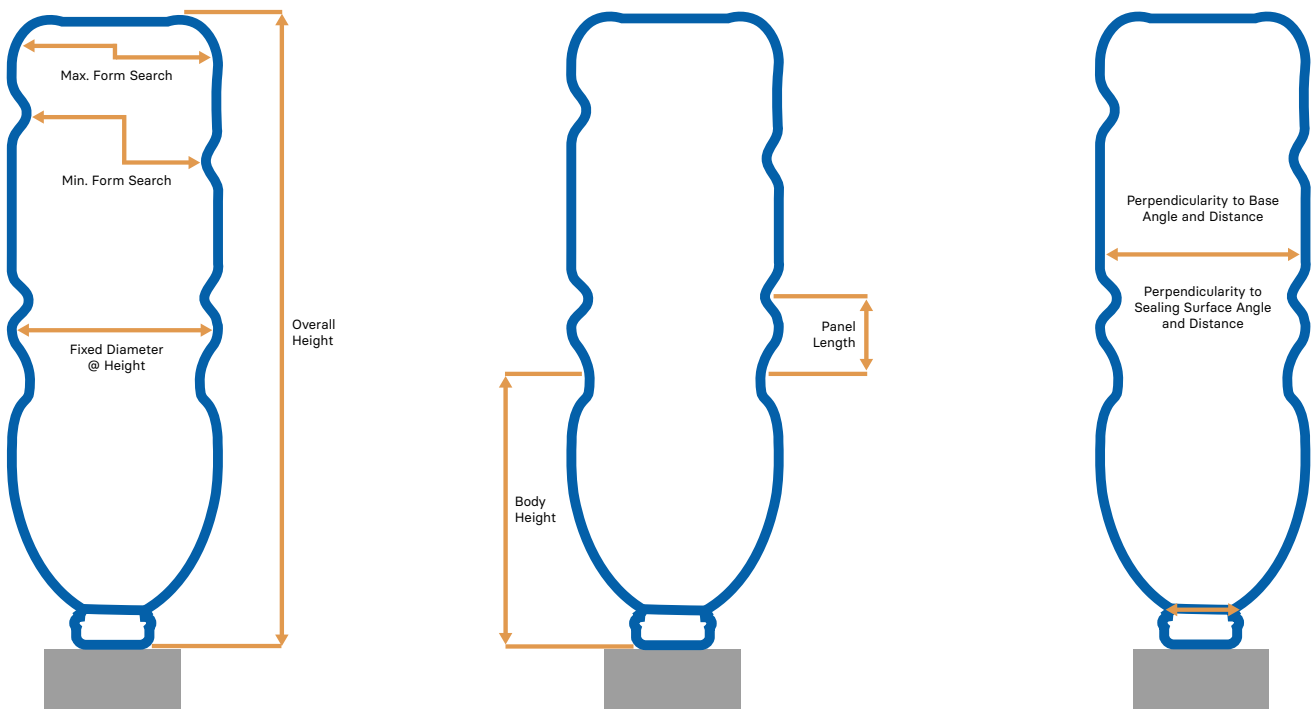
Technical Specification:

Material Types	PET, PP, TRITAN, PEF
Component Neck Types	Thread, Continuous thread, Split thread, PCO, SP, ROPP, Snap, Clinch, Crown Cap (others on ap)
Component Outer Neck Diameter	$\leq \varnothing 200$ mm
Component Internal Neck Diameter	$\varnothing 8.00 - \varnothing 170.00$ mm
Component Height Range	≤ 400 mm
Component Body Diameter	≤ 200 mm
Power	100-240V / 50-60Hz
Compressed Air	6 bar / 87 PSI
Dimensions	(W) 1450 mm x (H) 1850 mm x (L) 1100 mm

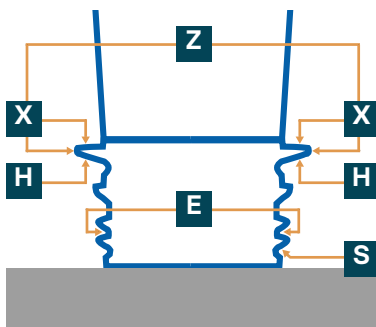
Ordering Information:

Article Number	Article Description
B302	Semi-Automatic Thread, Body and Thickness Inspection Gauge

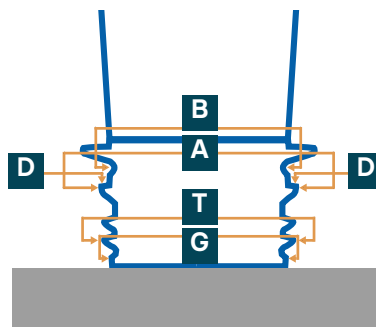
Body Features



Quick Snap Thread Features

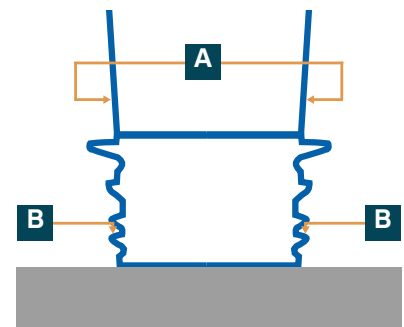


- (X) Support Ledge Height
- (H) Clearance Height
- (Z) Support Ledge Diameter
- (S) Thread Start Height Intersection
- (E) Thread Root Diameter



- (D) Tamper Evident Bead Height
- (B) Tamper Evident Bead Recess Dia.
- (A) Tamper Evident Bead Diameter
- (T) Thread Diameter
- (G) Lower Ring Diameter

Programmable Thread Features



- (A) Flexible Programming Diameter
- (B) Flexible Programming Height

The above shows examples of some of the measurement tests. More available - contact us to discuss

Disclaimer

The information contained in this document is liable to modification from time to time in the light of experience and our policy of continuous product development. Check the Industrial Physics website for the latest version.

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