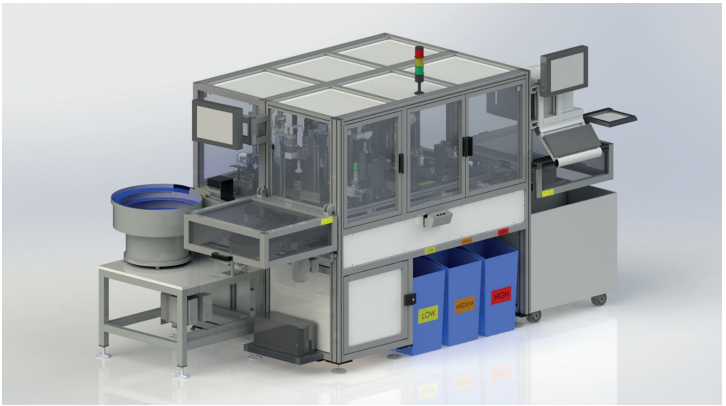
Product Information Sheet

B305 Automatic Preform Gauge



The B305 Automatic Preform Inspection Gauge is a fully configurable system capable of measuring and identifying all common industry features and defects.

Technical Specification:

Material Types	PET, PP, TRITAN, PEF
Component Colours	Opaque and Clear
Component Neck Finish	Thread, Continuous thread, Split thread, PCI, SP, ROPP, Snap, Clinch
Component Height Range	60.00 - 200.00 mm
Component Outer Body Dia. Range	≤ 40 mm
Component Internal Neck Dia. Range	Ø 16 – Ø 34 mm
Component Weight Range	0-250 g
Component Neck Height	≤ 35 mm

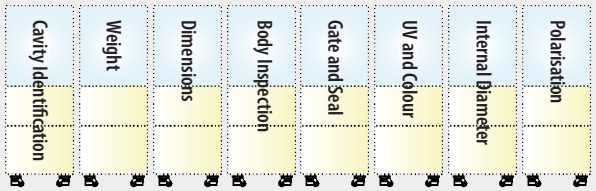
POWER
100-240 Volts / 50-60 Hz

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

COMPRESSED AIR
6 bar / 87 PSI

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 any of the below optional module.



A full range of modular inspection station options, enables the customer to identify the inspection requirements and configure a system to suit the needs of the production facility.

Automatic thread start alignment provides unrivalled 'absolute' dimensional measurement system performance, for both Neck and Body features, traceable and certified to UKAS Standards.

Using state-of-the-art optical technology and illumination the system can provide a wide variety of defect analysis for features such as Gate and Seal, Body Defects and Plastic Flow.

The UV and Colour Inspection quickly provides checks on UV transmission rates and Colour data against customer preform specification.

The loading bowl feeder, enables the operator to load full shots of preforms, with traceable measurement results provided by the Cavity Identification Module.

Benefits to your business

- Live batch data and part overview screens during operation
- High speed throughput - Cycle Times < 15 seconds per part – designed to run 24 hours a day, 7 days a week
- Full shot (batch) loading via quick access bowl feeder with up to 150 preforms load capacity at a time
- Traceable measurement data without operator influence.
- Flexible pallet system providing capability for a wide range of Preform types
- CSV Data output and flexible formatting for input into local data handling / control systems at customers facility
- Remote Support package, which includes automatic gauge monitoring and reporting back to Torus for proactive response
- Automatic calibration/qualification on all gauging as standard
- Measurements traceable and certified to UKAS/NIST Standards, with internal Torus annual calibration recall system, for continued measurement assurance
- Link in to Husky Shotscope which gathers the current production and avoids operator errors

Click here to view the video

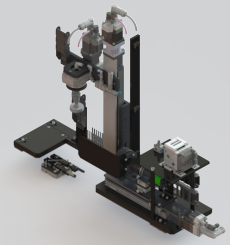
Customise your Gauge

Cavity Identification Module

Feature	Accuracy
Cavity ID	95% Read Rate

The Cavity Identification (ID) module completes an automatic cavity alignment to position the traceable cavity number correctly for recognition.

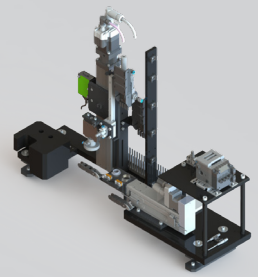
The recognised cavity number is then tagged to the feature results from the other inspection stations for process traceability.



Weight Module

Feature	Accuracy
Weight	0.05 g

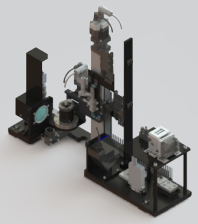
The Weight module uses a high accuracy load cell, specifically selected for measuring weights 250g or lower, to provide superior levels of accuracy, with a typical resolution of 0.01g. Fitted with auto load calibration as standard.



Dimensional Module

Feature	Accuracy
Neck Dimensions	+/- 0.030 mm
Body Dimensions	+/- 0.050 mm
Overall Height	+/- 0.030 mm
Gate Height	+/- 0.030 mm
Sinkage	Indicative

The Dimensional module uses the latest state-of-the-art telecentric lens technology. Automatic thread start alignment used to offer unmatched measurement repeatability in 2 positions relative to start of thread. Fitted with auto load calibration as standard.

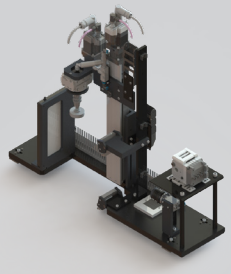


Body Inspection Module

Feature	Accuracy
Body Defect	Indicative

The Body Inspection module can capture typical preform defects such as Contamination, Scratching, Bubbles, Water Marks, Blemishes and Irregular Impressions.

This traceable information enables the operator to quickly identify production quality issues.

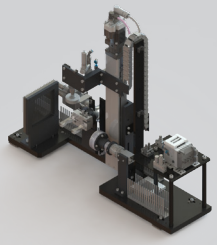


Gate and Seal Module

Feature	Accuracy
Gate Defect	Indicative
Seal Defect	Indicative

The Gate and Seal module can capture typical Gate defects, such as Tearing, Scratching, Burning, Castling and Gate Sinking, and typical Seal defects, such as Scratches, Notches, and Short Shots.

This traceable information enables the operator to quickly identify production quality issues.

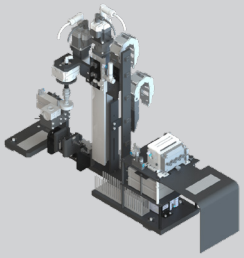


UV and Colour Module

Feature	Accuracy
Colour	+/- 1.0 Ecmc

The UV Module measures UV Transmission at a pre-defined wavelength, and multiple programmable heights on the body of the preform.

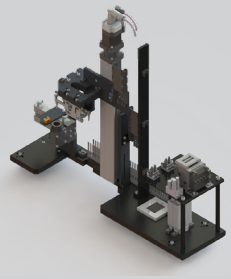
The Colour Module makes reflective colour measurements on the outer wall of the preform. These are compared against the customers preform colour requirements to ensure the final product is exactly what is expected.



Internal Diameter Module

Feature	Accuracy
Internal Diameter	+/- 0.030 mm

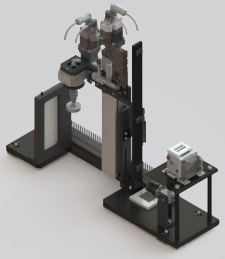
The Internal Diameter module works in conjunction with the dimensional module as a continuation of critical dimension inspection. Using contact measurement probe technology, the features are measured at 0° and 90° positions as standard. Fitted with auto load calibration as standard.



Polarisation Module

The polarization inspection module uses vision technology, illumination and filtering to capture 8 images around a 360° complete rotation of the preform. The images are recorded for each preform, to be reviewed by the operator during and at the end of the batch run.

This traceable information enables the operator to quickly identify production quality issues.



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