Automatic Score Inspection Gauge

Z606

INDUSTRIAL PHYSICS

Protecting
Product Integrity

Automatic Score Inspection Gauge

The Torus Z606 Automatic Score Inspection Gauge features successfully tested automatic, non-contact technology for accurate, reliable, and traceable measurement of beverage and food can ends.

Brought to you by Torus, the Z606 provides the highest accuracy, repeatability, and usability for score residual measurements of beverage and food can ends.

Impressively precise, the uniquely innovative technology of our revolutionary score inspection gauge reimagines industry expectations and standards. With its super-fast cycling times it's ideal for high-speed production line environments.

The Torus Z606 is extremely precise. With precision levels of less than 1 micron, users are able to obtain incredibly detailed analysis of their residual scores. Our R&D team achieved this feat with the power of white light scanning interferometry technology. This is combined with a narrow band light source and a high-resolution voice coil positioning slide so the upper and lower surfaces of the score area can be scanned with high-resolution.

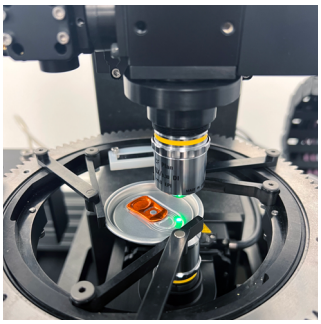
Each automatic score inspection gauge features two interferometry sensors that scan the 2.3 million surface data points. By combining vertical scanning with X, Y area scans, it achieves unprecedented resolution with each and every residual thickness measurement.

Scans complete, you get the following results:

- Instant pass and fail feedback, based on your parameters
- Graphical section plots showing the score profile - for lifetime monitoring
- 3D data for output so you can perform detailed analysis and evaluation

Technical Specification:

Component Materials	Aluminum / Steel
Component Stages	Food / Beverage Ends
Component End Range	45 - 93 mm Curl Diameter (113 - 307)
Score Residual Accuracy	+ / – 0.001 mm
Gauge R&R	< 0.002 mm
End Material	Aluminum / Steel
End Stages	Converted
End Sizes	113 – 307
End Diameters	Ø 45 – Ø 93 mm
Power	100 - 240 Volts / 50 - 60 Hz
Compressed Air	5 bar / 73 PSI
Weight	690 kg
Dimensions	(W) 2030 mm x (H) 1702 mm x (D) 1135 mm



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Measurement Features:

Score Average Residual	Accuracy: +/- < 1µm	Repeatability: < 2µm

Ordering Information:

Article Number	Article Description
Z606	Automatic Score Inspection Gauge

Specification:

Easy to setup

- Simply setup measurement positions using a drag and drop interface on an image of the End to be measured.
- Alternatively X,Y co-ordinates can be entered referenced from the centre of the End or other user-defined datums.

Pioneering Technology

- 3D Scanning White Light Interferometry Sensors developed by Torus, provide sub-micron resolution and unparalleled detail.
- Bespoke algorithms analyse up to 2.3million data points per scan to provide accurate Score Residual Thickness Measurements.

Results and Feedback

- Mimic Screen provide instant feedback for Pass / Fail.
- Graphical Section plots show the Score profile for lifetime monitoring.
- 3D data available for output to preform detailed analysis and evaluation.

Benefits:

- Automatic, non-contact technology removes human error & bias across all batches
- Industry changing gauge – the technology is the first of its kind, the best of its kind, and proven to work
- Ideal for supporting high-speed production lines
- Extremely precise measurements (<1 micron)
- Scans 2.3 million data points per point location – increased through-put & data generation
- Enjoy complete confidence in residual score measurements – reduce costs, spoilage & complaints
- Automation/short cycle inspection times frees up labor hours available, improves compliance & increases your ability to scale.
- ROI on tooling information, understand manufacturing equipment better, greater information on your QC process
- Machine vision end orientation for rapid scans
- Programmable inspection routines, with point location input and full score path measurement
- Increased multi-size loader capacity for automatic operation and multi batch capability:
  (Z606 allows you to load up to seven stacks of can ends per cycle)

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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