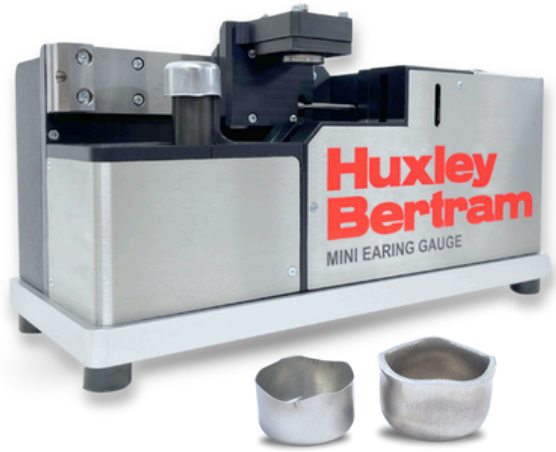
Huxley Bertram
Cambridge, UK

MINI EARING GAUGE

Contactless Earing Measurement for Earing Cups

The Mini Earing Gauge performs high speed, high accuracy contactless measurement of Earing Cups in a compact benchtop format.

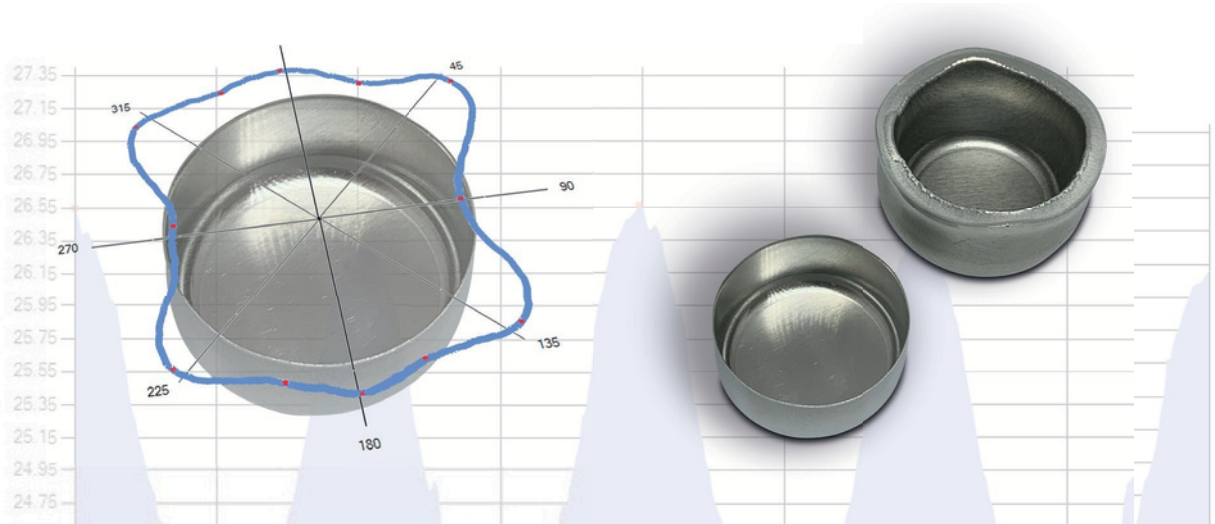


Laser Micrometer technology plots Earing profiles to micron resolution and sees Cup features too small for contact technologies.

Compatible with 33 to 55mm ID Cup formats, and heights from 12 to 44mm to match common Earing press formats.

The Mini Earing Gauge produces results to EN 1669 and ISO 11531 standards, and gives operator insight into Earing properties, Cup quality and even rolling mill process control.

Huxley Bertram has 30 years of experience in Earing measurement and has supplied Earing measurement equipment to industry partners across the globe.

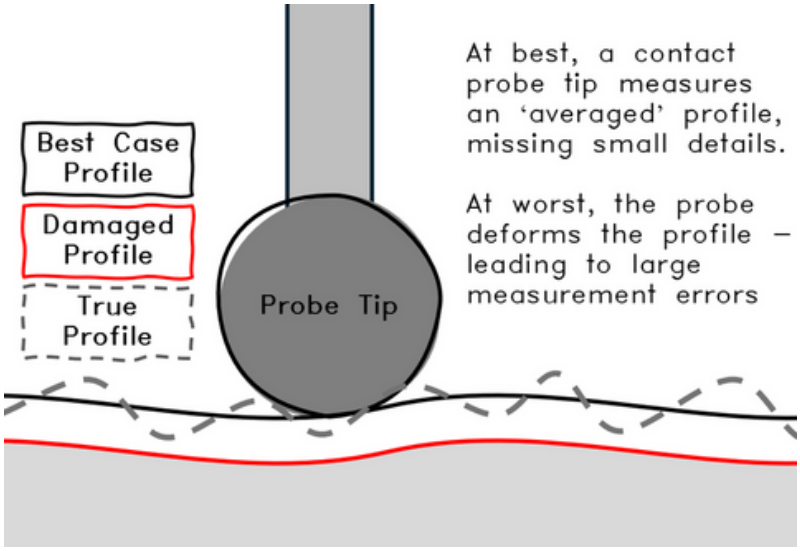


Why choose the Mini Earing Gauge?

Contactless laser micrometer technology overcomes the drawbacks of physical probe measurements.

Physical probes cause significant inaccuracies in Earing measurement. Due to the measure probe being physically pushed against the Earing rim, it often distorts the Earing profile, destroying delicate features and giving erroneous measurements.

Physical probes are also limited by their own diameter (typically around 1mm). Features smaller than the probe are 'smoothed' in measurements, and valuable data is lost.



Laser measurement technology can see features smaller than 100 microns, with 3 micron measurement accuracy.

Innovative Cup-holding techniques twinned with the high-speed contactless measurement mean that operators can produce fast-turnaround results even for large batch sizes.

Windows Industrial PC architecture integrates seamlessly with existing data storage solutions

- The Mini Earing Gauge is built around a Windows environment, meaning data is easily exported to data-warehouses or centralised systems.
- An integrated hand-held barcode reader can automatically import batch data, tying Cup measurements to Coils with confidence.
- 'Mouse and Keyboard' input and straightforward HMI minimises Operator training requirements.
- Measurement and results displayed on the same terminal - data integrity maintained by minimising opportunities for operator error.

Real-world resolution is better than +/- 3 microns.
Real work repeatability is better than +/- 10 microns.

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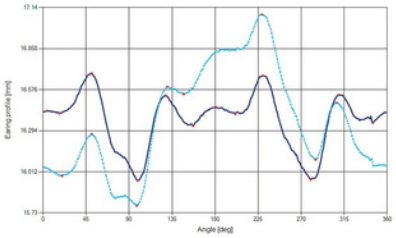
Huxley Bertram Earing Analysis Software

Developed and refined with over 30 years of Earing measurement experience, proprietary HB Earing Analysis Software produces easy to interpret results that allow material to be released with high confidence.

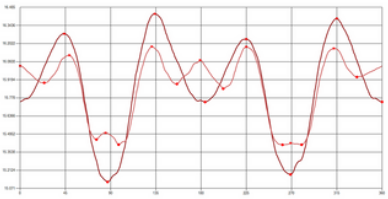
Working to EN1669 and ISO11531 standards, the software automatically identifies peaks and valleys and removes Cup skew introduced by press misalignment. Earing calculations are then performed to suit the identified Cup profile class. User definable Go / No Go ranges highlight non-conforming Earing results, and poor Cup quality is identified and signalled to the operator.

Plots for the original skewed data, the de-skewed data and the fitted idealised curve are automatically generated. This allows operators to rapidly access the validity of the data and enable rapid batch release and quality assurance processes.

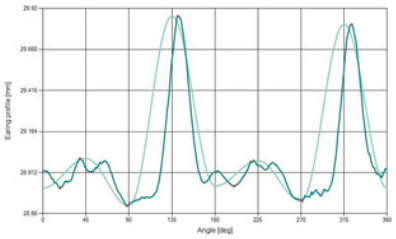
Calculation results are saved to a CSV file and directly sent to a network location for harvesting by a batch-release or data warehouse system. In addition, the software generates PDF results reports so that detailed results and graphs may be shared with colleagues and customers.



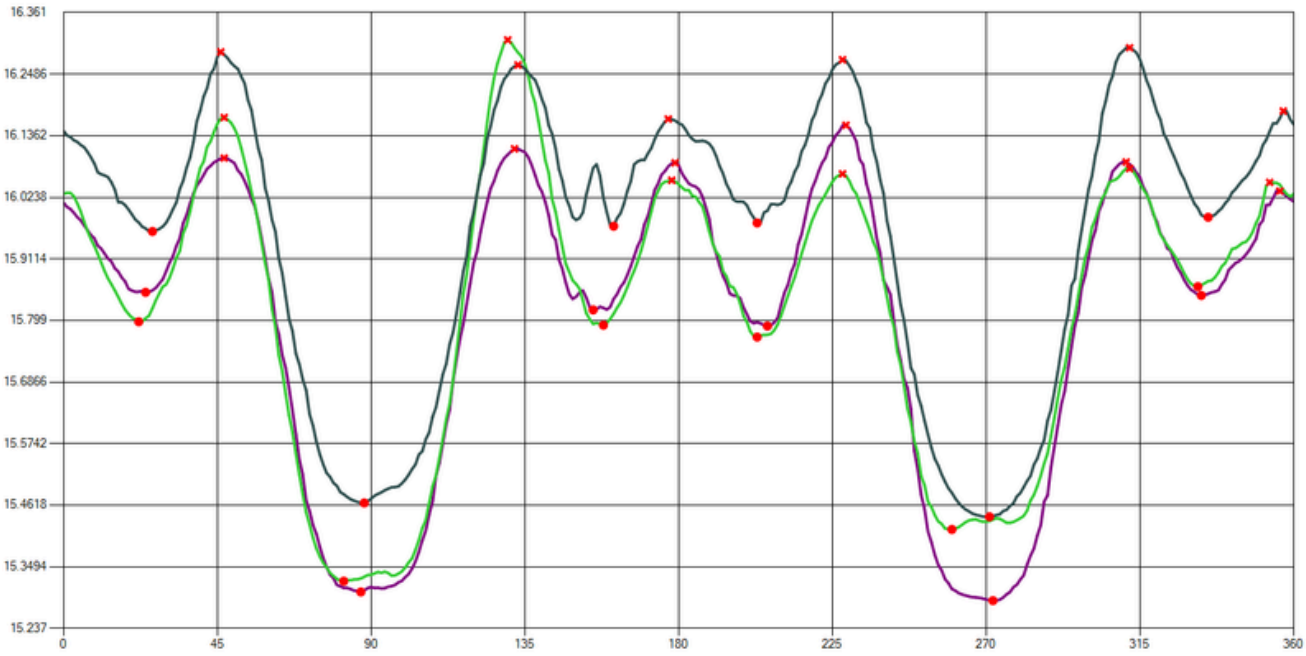
Automatic Profile De-skew



Identify 4, 6 or 8 peak Earing, and isolate hot or cold rolling artefacts



Display Against Scaled Ideal Profile



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Machine Specification

Specification	
Cup Internal Diameter:	33-55mm
Cup Height Range	12mm to 41mm
Max Earing Peak Trough Distance:	28mm
Maximum Cups Measured per hour	120 / hour
Typical Measurement Repeatability:	+/- 10 microns
Typical Measurement Accuracy:	+/- 3 microns
Earing Measurement Repeatability:	+/- 0.01% EN1669 Mean Earing [1]
Dimensions:	400 * 160 * 220 mm
Weight:	17 kg
Pneumatic Supply:	Clean, dry air. Min 2 bar pressure.
Electrical power:	240/110 V AC 50/60 HZ.
Operating Environment	Windows

[1] Typical range for 10 repeat measurements of an Earing Cup

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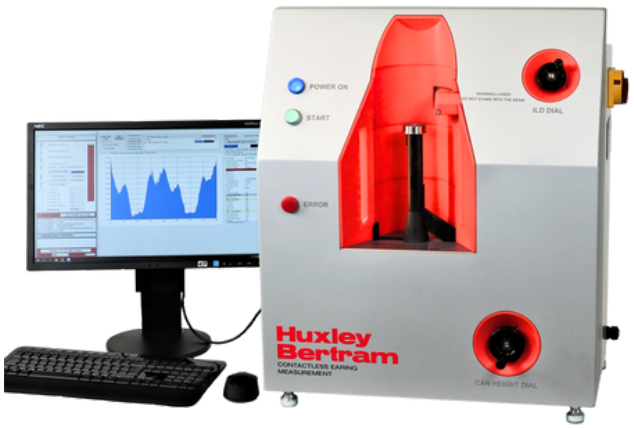

Contactless Earing Measurement Unit

Measure Can edge profile in all common Can formats

Contactless Can Wall Analysis Machine

Generate 3D plots of Can walls to characterise bodymaker performance

EP Electromechanical Earing Press and Measurement system

Best in class Earing press performance, EN1669 repeatability to 0.07% Mean Earing

Explore our other Earing solutions

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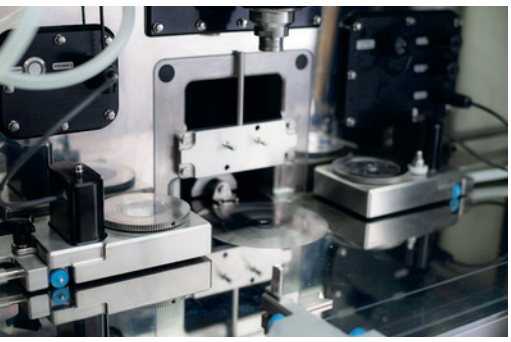


Huxley Bertram

Huxley Bertram Engineering Limited designs and builds special-purpose machines, automation and test equipment; alongside a select line of products for specialised industries.

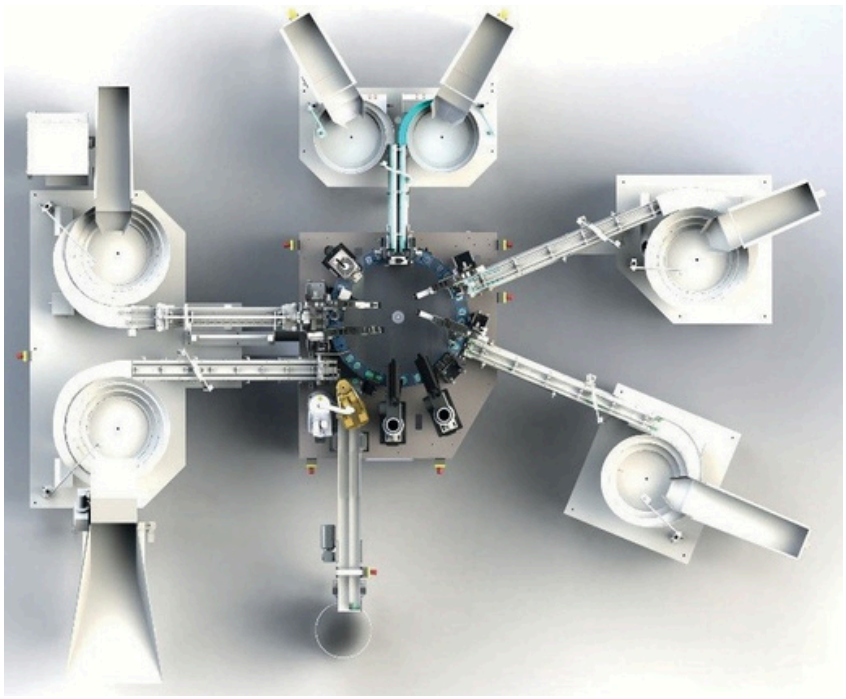
These innovative solutions enable companies to increase quality and throughput and reach new markets. Huxley Bertram regularly supplies equipment and supports customers all around the world.

The company collaborates with clients to solve complex challenges with the right mix of innovation, technology and simplicity.

Huxley Bertram was founded in 1979. Since then, it has delivered over 1,000 solutions, transforming clients' operations in industries from pharmaceutical and nuclear to research and academia.

The business is located in Waterbeach, Cambridge, with facilities measuring over 25,000 sqft.

For more information on Earing Measurement Units or Huxley Bertram Special Purpose Machines visit **www.huxleybertram.com** or inquire below.



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