

3D SCANNING: AUTOMATIC CAN MEASURING

AriTech-Can scann Station aims to provide a full automatic can scanning and measuring control. The device provides highly accurate 3D scanning and above control vision on the can, along with specifically developed software that allows full automatic dimensional control of cans.

Fast and accurate.

The station scans the can and takes its above view. After it automatically constructs the 3D model of the perimeter of the can.

Automatically measures:

- Visible dimensions from a above view:
 - Maximum curl ID
 - Mínimum curl ID
 - Máximum curl OD
 - Mínimum curl ID
- Visibible dimensions from side view with axial and rotating movement:

Dimensions checked from a side view of the can

- Total length.
- Contact height.
- Curl length
- Gorge height
- Any dimensión from a side view of the can

Gorge specs

- Gorge height
- o Gorge OD
- o Gorge ID

Shape and shoulder specs

- Starting point height
- Shape length (full shape comparation)
- Inside diameter

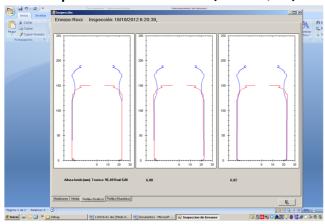
Thread specs

- OD from external thread
- ID from inside thread
- Chimenea height



APPLICATIONS

- Dimensional control of multiple parameters.
 Compared to theoretical value and / or the last measurements.
- Reverse Engineering. Obtaining 3D.
- Calculation of wear.
- Comparation with theoretical 3D.
- Traceability of can: Register in the Database of historical previous measurements (3D wear, etc).



MORE MEASUREMENTS

Embossed cans

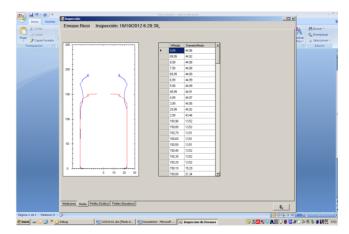
- Height of embossing.
- o Depth of embossing.

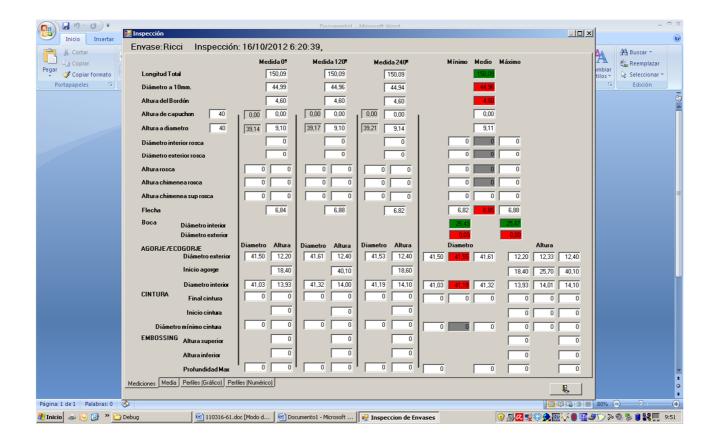
Measures from the bottom

- Bottom depth height

Individual measurements

Contact height. Height of opening lip from and inside reference





OPERATION

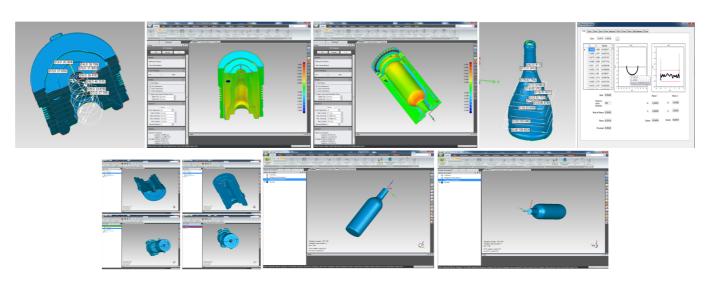
AriTech can-scann station provides high-speed scanning.

Process:

- 1°.- The can is identified in the HMI.
- 2°.- It is automatically singled out in the database and presets measurements to be made to the can are determined.
- 3°.- Can is scanned and a full 3D model is reconstructed.
- 4°.- Full dimensional report on the aforementioned can is provided, including full-colour 3D wear assessment.

ADVANTAGES

- Measurement of the parameters IMPOSSIBLE to be measured with old traditional techniques:
 - Wear with 3D colored map.
 - Diameters in ALL the perimeter not only on the edge.
 - Measurement of any shape concentric or non concentric with accuracy and comparation with drawing.
- Objective. It is not linked to worker's expertise.
- Traceability. Due to data measurements historic we know its evolution and its lifetime.



FEATURES

- Accuracy: 0,015mm
- Speed: Scanned, procurement of 3D of a complete can and issue of an automatic measurement report.
- The 3D can be exported into extended formats: 3DS, STL, OOGL, PLY, OBJ, LWO, CRP, WRP, DXF, VRML, IV
- Possibility to import CAD from the following formats: IGES, VDA, Neutral, Parasolid, SolidWorks, Catia, NX, SAT Pro / Engineer, PRT, STEP 203/214.

AUTOMATION

Possibility to develop new measurement patterns tailored to each client, as a turnkey solution.

So that it could be made in a fully automated way the scanned and automatic measurement of other parameters, different from the current product capability and the automatic issue of the report with results analysis and interpretation.