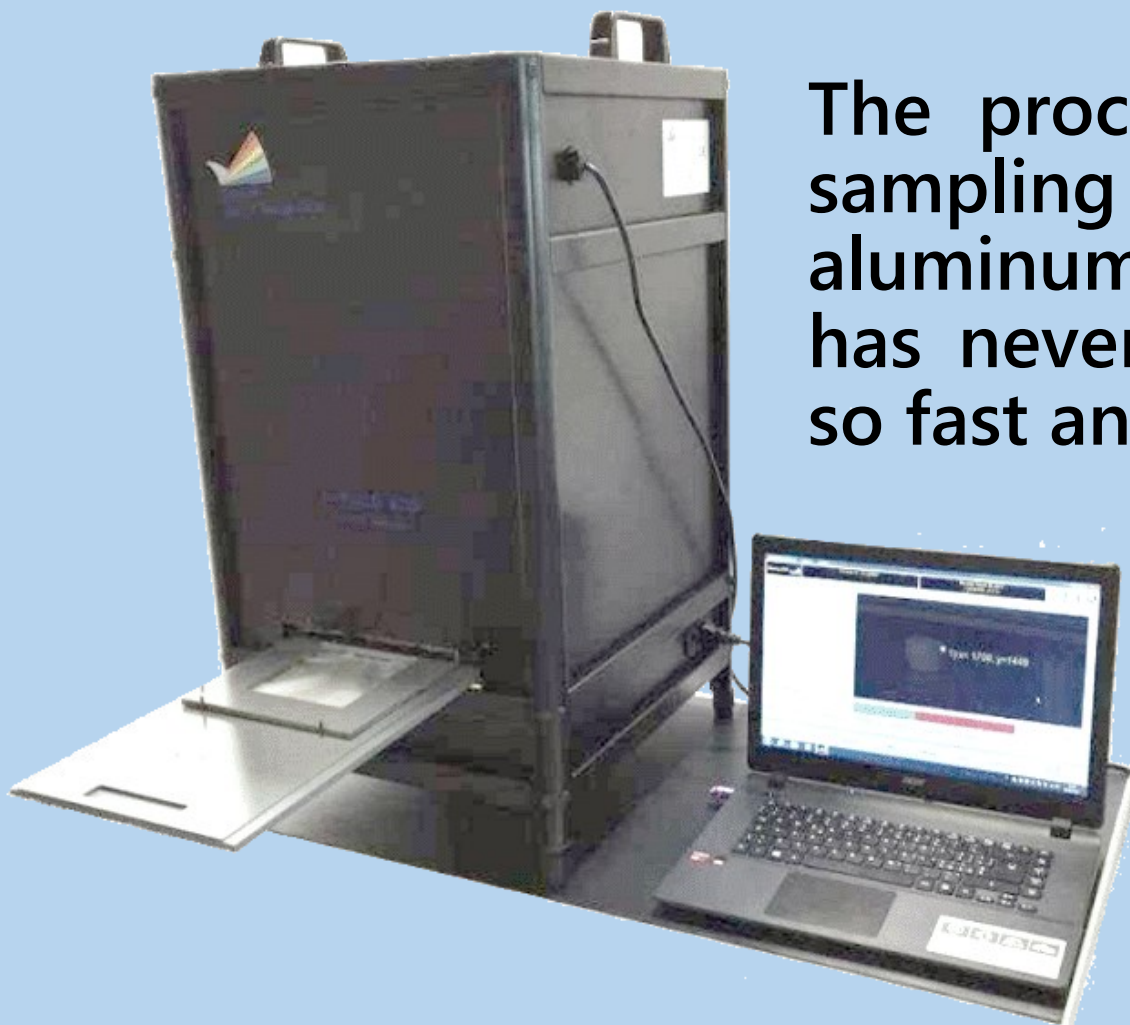




P-PhOD 100 Optical Pinhole Analyzer

DESKTOP VISION SYSTEM FOR RAPID ANALYSIS OF
NON-TRANSPARENT SAMPLES



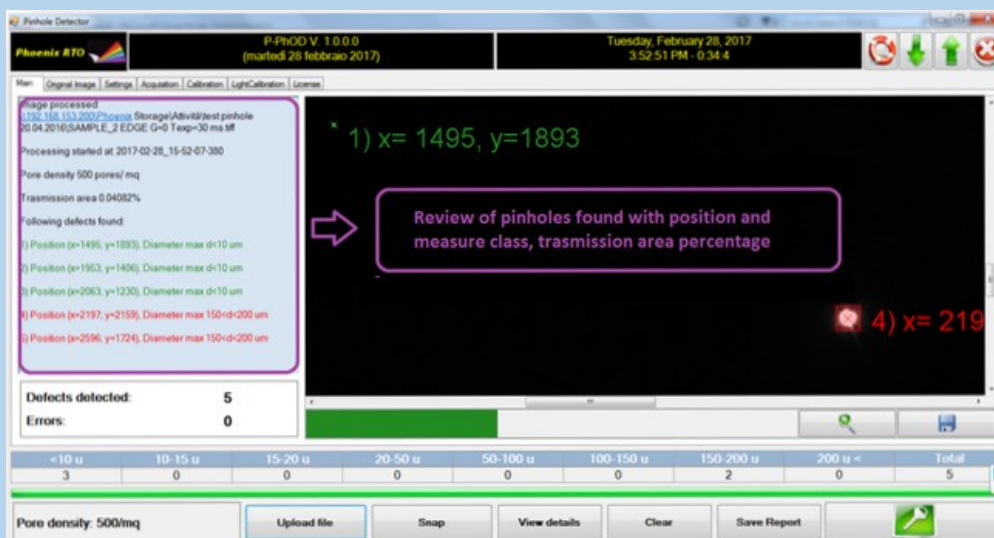
The process of
sampling your
aluminum foil,
has never been
so fast and easy

Features

- Analyzes aluminum foil and non-transparent membrane samples
- Measures and classifies pinhole occurrence within a surface area of 100 x 100mm
- Statistical product quality monitoring
- Measures pinhole count
- Measures pinhole diameter and distribution **down to 5µm**



P-PhOD 100 is a compact and user-friendly device that allows a constant and always precise monitoring of the industrial production of aluminum foil, and any kind of non-transparent membrane.



Why use Phoenix P-PhOD 100?

The special barrier properties of aluminium foil, and non-transparent membranes, are used in a variety of situations, in particular for the durable packaging of perishable products such as pharmaceuticals, cheeses, juices, etc.

The barrier quality is determined essentially by the porosity of the foil, represented by the number of pin holes per squared meter.

The widely used method of visual sample inspection on a light table is rather insufficient to provide real objective quality and for the grading of the foil.

Real quality control for non-transparent foil is now possible, using the Phoenix P-PhOD 100, a foil sample analyzer unit that can perform a visual inspection of the sample in mere seconds.

P-PhOD 100 instrument allows efficient sample control of aluminum foil and non-transparent membrane.

It takes only one second to analyze a 100cm² sample.

The P-PhOD 100 **VISUAL** analysis can provide an instantaneous and exact measurement of the number and diameter distribution of pin holes down to a minimum diameter of 5µm, considerably speeding up the sampling, and giving an overall better final quality of the production.

Operation

To operate P-PhOD 100, the operator takes a foil sample directly from a coil and inserts it into the sample tray.

The tray is then inserted into the P-PhOD 100 device and, after entering the production data (coil identification, foil spec. etc.) the measurement is performed.

Within one second, the optical sensor fully scans the sample "looking" for pin holes and, after the analysis, if any pinhole is found, the software generates a list with individual sizes and positions.

The Signal "energy" represents the amount of light passing through a hole, which is in first approximation proportional to the cross section of the hole. The software calculates the equivalent diameter and position of individual pinholes.

Calibration

The determination of equivalent pinhole diameter using transmitted light measurement results in a "relative magnitude", therefore, the system needs to be calibrated before use.

Calibration is done by the scanning of three different precision pin hole targets with known diameters. By scanning these targets and analyzing the signals, a calibration function is applied and recorded. Calibration targets are to be inserted into a specific calibration frame, which can be regularly used for re-calibration.

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