



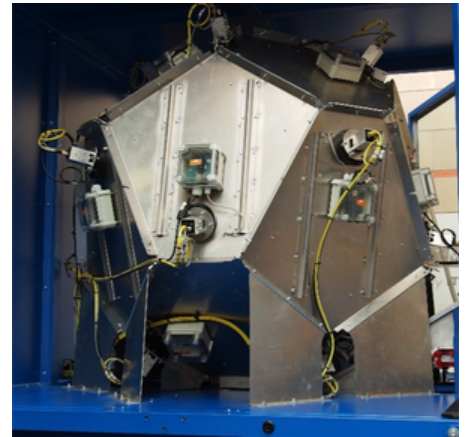
SURFACE ANOMALY DETECTOR

Analyzing 120 parts per minute, detecting 90% of defects, classifying parts by model, and rejecting unknown components

SOLUTION DESCRIPTION

The Surface Anomaly Detector employs a 3D camera-based inspection system alongside AI algorithms to assist manufacturers in ensuring comprehensive quality across their entire production line. It effectively **identifies visual defects on the surface of manufactured goods, thereby preventing the inclusion of faulty pieces in the final product.**

The system's focus on detecting surface defects, often challenging to identify through volumetric analysis, is complemented by AI-driven algorithms. These algorithms are trained to analyze images and pinpoint abnormal zones in the object, facilitating efficient defect identification.



MAIN BENEFITS

- ▶ Live monitoring of all production parts
- ▶ Part classification, avoiding product specific solutions
- ▶ Cost reduction: no down-time and no maintenance
- ▶ Millimetrical surface defects that human eye cannot detect



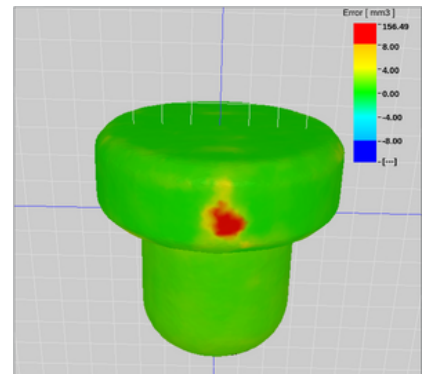
SUCCESS STORIES

The **bottle stoppers manufacturers** encountered challenges:

- Hundreds of references required human visual inspection.
- Millimeter-level surface defects went undetected, resulting in flawed products reaching clients.

The Surface Anomaly Detector solution effectively resolves these issues by achieving specific objectives:

- Classification of references and algorithm training tailored for each stopper/product.
- High-precision detection of surface defects, preventing customer returns due to product flaws.



PRODUCT OWNERS:



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



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