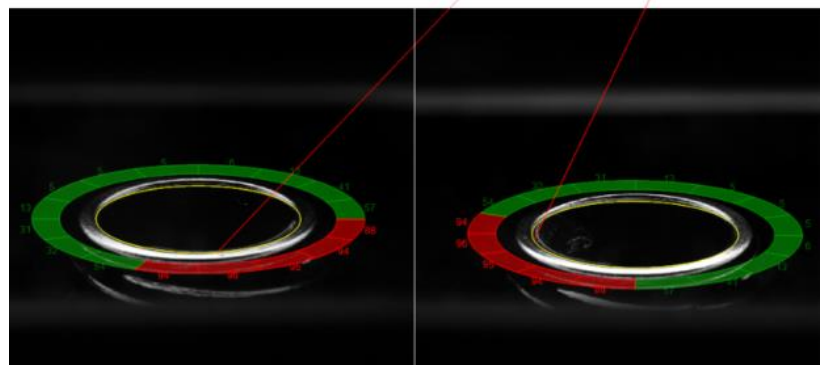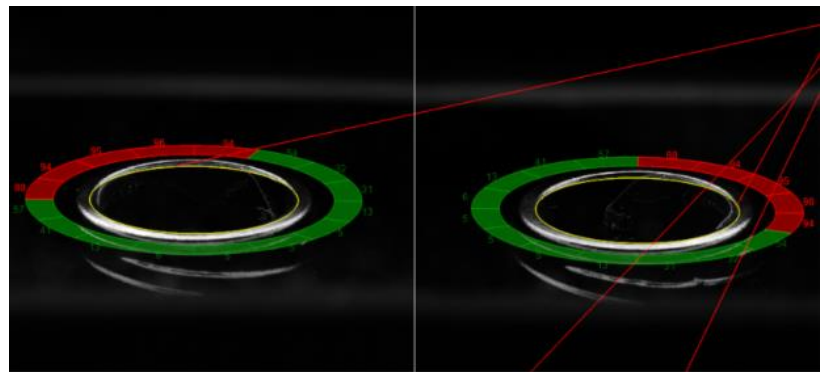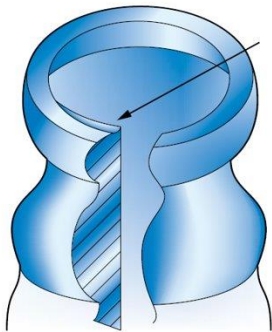# Technical News Bulletin

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Wire Edge inspection with SCOUT Ai detects wire edge and over-press defects

- Ensures packed ware quality is free of wire edge defects
- Uses deep learning technology to detect wire edge defects
- Quick and easy setup with minimal parameter adjustments
- Minimizes ware losses caused by process variations

Introduction

Wire edge detection with SCOUT Ai is an available option to the Finish 1 inspection device. This wire edge solution was designed, tested and qualified to meet the strict specification limits of 0.1mm above the match line put forth by the filling industry.

System Description

Wire edge detection with SCOUT Ai adds four 1.3MP cameras to the Finish 1 device. The optical design provides the cameras with a direct view of the match line where defects occur.
Wire edge with SCOUT Ai was trained via deep learning to identify specific features in a finish to pass or to fail based on the quality limits. To further enhance and expand the predefined image database, additional image sets can be trained with the push of a button.

Process variations affected the inspection
Due to the challenging characteristics of this type of defect, setup was often difficult and needed frequent adjustments to maintain acceptable reject rates.
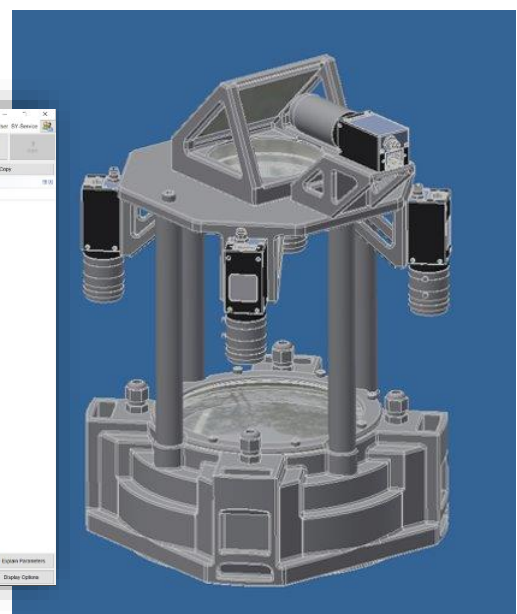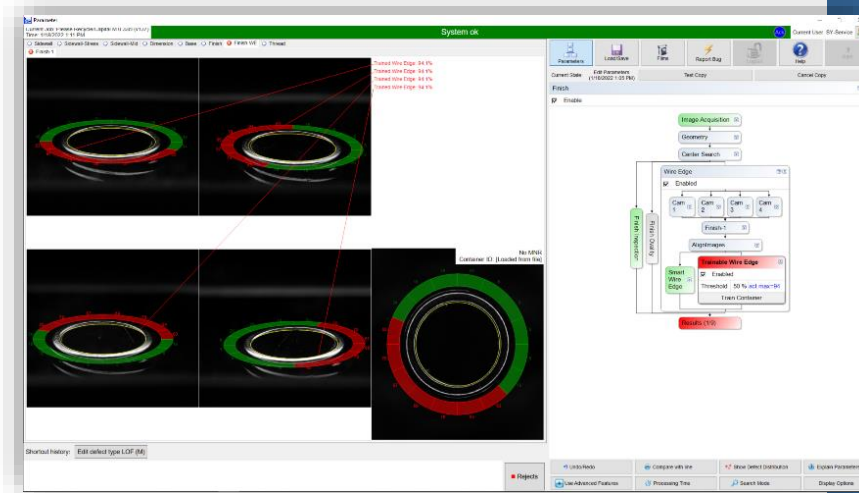
SCOUT Ai is the solution
The wire edge detection with SCOUT Ai takes the setup out of the inspection. Due to the new optical design and the image database created via deep learning, continuous modifications to the setup parameters are a thing of the past.

Specification

Bottle range:
- Finish diameters up to 42mm [1.65 in]

Availability / Application

SCOUT Ai wire edge inspection is available for FleXinspect B Gen III, eco, Chili G1, G2, FIM and FleXinspect F.

Installation Requirements

For field upgrades on older equipment, the system must be updated to the latest 64-bit processing platform.

Features	Benefits
Four 1.3 MP cameras with angled optics	Provides four high resolution views to the finish match line where the defect occurs
SCOUT Ai deep learning database	Compares each finish against tens of thousands of pre-learned finishes to identify abnormalities
Quick learning feature	Allows to fine tune the database (pass/fail) further
Visualization of the wire edge	Visual feedback of the inspection result allows the operator to quickly assess the machine performance

Sealing Surface Finish 1 with Wire Edge

Optionally, Finish 1 can be equipped with 4 additional cameras dedicated for wire edge/overpress detection.