

Bosch Auto Parts Barcode Inspection System Implementation Faulty Label Detection



Bosch Automotive in Changsha, China (BA) is a subsidiary of Bosch. BA is a tier-one supplier to automobile manufacturers. It manufactures major components such as generators, radiators and seat adjustment systems. In 2022, BA was the first smart manufacturer from Hunan province to become the "Lighthouse" factory.

Business Challenges

1. Prevent defective labels from getting to the customers leading to compensation and losses
2. Fulfill online requirements of printing, inspecting and segregating defects for 20 mm (height) label
3. Build electrical interface between printing inspection and PLC for transmitting results and printer status
4. Work under space constraint and ensure inspection system installation does not occupy additional space
5. Conveniently switch between labels types and interface with printer software

Solutions

Online rapid label inspection



Upon careful assessment of various systems, BA decided to proceed with BLC's B-ZT6166, an integrated printing and inspection solution (single physical unit) across the site. The advantages of B-ZT6166 include:

Seamless Integration - The BLC not only fully integrates with Zebra ZT610, but also maintains the defective label segregation feature. The smallest possible detection is down to 12 mm (height)

Quality Inspection - The BLC inspection software fulfills the barcode and text inspection requirements. It allows rapid access to the inspection module and interfaces with the MES

Interfaces - The 7-way input/output feature allows electrical interface with PLC. Meanwhile, BLC has a smart flat field camera at the printer exit and is capable of inspecting the first label

Benefits

The BLC installation ensures every label from BA passes the label output requirements. It eliminates customer panelty and recall due to non-conformities while maintaining the existing manpower within the operation. The company continues to upkeep its reputation and service excellence to customers.

