EPSILON
Controls & Automation

Application Note...

Correct Part Verification to Avoid Product Mix-up

Customer
A large scale Automobile and Metal Assembly industry

Customer Requirements
Reliable presence detection of correct part on high Speed machine

Epsilon Solution
P4 EDGE 1.3 with 16 mm lens and white spot light

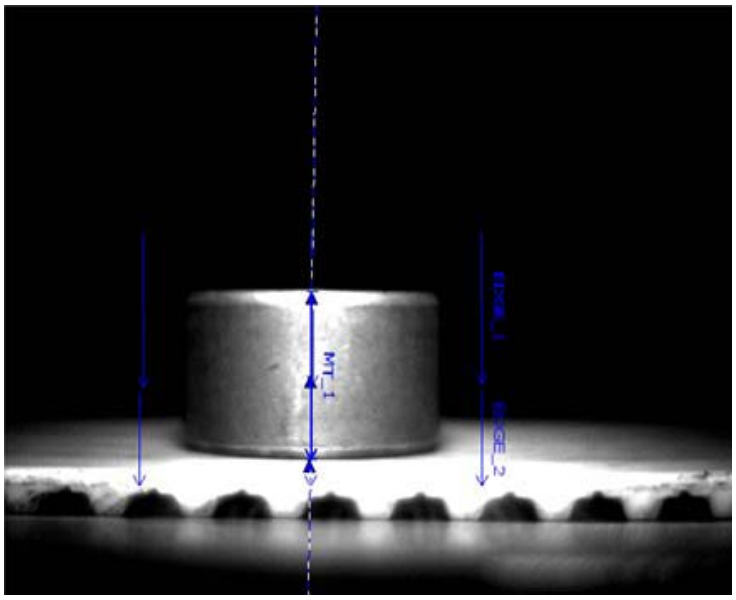
Why Epsilon?
Speed: - Sensor performs inspections within 20-25 ms on Parts traveling at 80-320/minute

Customer Benefits:
- Improved Productivity
- Easy installation
- Improved Speed

Product Image

PresencePLUS P4 Omni Features
- 1.3 OMNI model (1280 x 1024 pixels) provides accurate analysis at high speeds
- Includes remote TEACH, configurable I/Os, live video and communications standard to all PresencePLUS sensors
- Features compact, self-contained P4 housing

Visit www.epsilonfiberoptics.com for more application Solution



Deployed 150mm from its target, an P4 EDGE1.3 with 16mm lens inspect for the detection of correct part *Speed Machine*

Background
A large-scale automobile and metal assembly company The Company manufactures seals that are polished in a rotary Grinder. It has to be ascertained that the wrong component does not go in to the grinder as it would damage the machine.

Challenge
The Products traveling at speeds of up to 320/minute with so many Challenges on same speed the height difference between two products is hardly 0.5 to 0.7mm.The product mix-up is to be avoided taking product height as the measurement parameter.

Solution
The Epsilon high resolution P4 EDGE 1.3 with 16mm lens image sensor provides a simple way to perform sorting using the Edge and measure tool, in this application we have to sort components of different height for this purpose we have measured height of individual component. While a product of particular height is running in between other component comes camera gives fail signal to the plc and one electronic output is generated from the PLC to throw the wrong product out.