## EPSILON

Controls & Automation

# **Application Note**

# Detection of missing black or white/ Twist / flanges without gasket

#### Customer

A large scale drum closures manufacturing industry

#### **Customer requirements**

It should detect missing black or white gasket, twist on any one gasket, flanges without gasket on the side facing camera

#### **Epsilon solution**

Sensopart visor V10-S object camera with lens and white internal light.

#### Why Epsilon

Epsilon provides economic and reliable solution for critical application



VISOR V10-S is deployed 110 mm from its target for detection of missing black or white/ twist/ flanges without gasket

#### **Customer Benefits**

- Improved Quality of product
- Helps customer achieve zero defect
- Easy to change in program
- Less area consumption

#### Visor V10 feature

- Multilple tools can be used in same job
- Connection of PLC via M 12×1, 12 pin plug
- Display of VISOR switching outputs via LEDs
- Simple configuration with the help of PC and VISOR software

#### **Learn More**

Visit <u>www.epsilonfiberoptics.com</u> for more application information

### **Background**

Customer is large manufacturer of drum closure. They require system to reject their faulty product in the sense of missing black or white gasket, twisted gasket and also flanges without gasket.

#### Challenge

The gasket has different marking of dots in white, black and yellow colour. Sensor should avoid these dots while inspection. The sensor position is such that it should capture faulty area of gasket.

#### Solution

The VISIOR V10-S sensor capture the edges and pattern of gaskets so that it can differentiate passed gasket and failed gasket for that we use pattern matching and contour detectors with median pre processing tool

