

Customer Requirement:

Effectively detect the UJ mark on paint cans for printing purpose

Epsilon Solution:

The iVu Plus TG delivers an intuitive interface and functionality and comes with three new powerful features: Ethernet communication, Multiple Inspections, and a new Sort Sensor.

Why Epsilon?

Effective Solution

Epsilon provides effective and reliable solutions for critical applications

The winning point is Epsilon's support and Service

Customer Benefits:

- Improved Productivity
- Easy installation
- Improved Speed



iVu Plus Integrated TG Features

- Offers the complete sensor set: Area (includes Area with tools for motion), Blemish, Match and Sort
- 2.7" (68.5 mm) LCD display (320 x 240)
- Adjustable focus lenses
- Inspection system logging
- High speed processing
- Auto exposure function

UJ Mark Detection on Paint cans



Background

Customer is a manufacturer of Liquid filling machines. Application is to identify the mark on paint cans. With reference to the mark printing of MRP and MFG date will be done on to the can

Challenge

For inspection the mark to be sensed should come in the view of camera. When cans comes in front of camera they are in rotating condition. Locating the mark in rotating condition was a challenge. Printing is done with reference to the mark, There was shifting in the position of printing. Avoiding this shifting was a challenge. The critical factor is to keep the scan time low enough so that the mark is not missed at a rotation equal to 72 mtrs/ min speed.

Solution

For this application we are using iVu Plus TG with 12mm lens. When cans comes in front of camera they are clamped between three wheels which are rotating. The camera is in continuous Trigger mode when camera identifies the mark successfully it gives a signal which is used by printer as a print command. For identifying the mark we have used match tool which finds the best pattern with in the specified FOV(Field of view) we have kept the percentage match high for finding best pattern the width of output pulse which is given by the camera is 50ms