

# Disposable Diaper Inspection

Diapers going down a conveyor belt must be inspected for size, curvature, elasticity and length. It is important to conduct inspection with accuracy to reduce constriction of the diaper and prevent harm to the user.



Computer system with Blob Analysis and Area Measurement Software



PLC which controls gate on conveyor belt



### Solution:

GigE cameras are connected to a computer equipped with a programmable logic controller (PLC). The cameras capture images of the diapers travelling down the conveyor belt and relay them to the computer.

The computer conducts blob analysis and area measurements of the diapers from the visual data. The PLC controls a gate on the conveyor belt. If a diaper does not meet manufacturer's specifications, the gate redirects it to an alternate belt for recycling.

The diapers which meet specifications are sent to packaging for distribution.

Diapers traveling down conveyor belt at high rate

GigE Cameras

Rejected diapers sent for recycling

FAIL

PASS

Direction of conveyor belt

