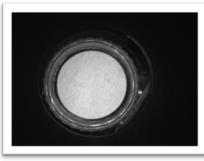
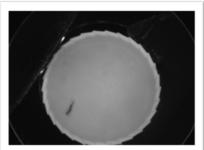
# Leading Pharmaceutical Manufacture Commissions Product Defect Detection System





# **Main Objective:**

The customer desired to integrate a bottle cap inspection with the automated assembly equipment. Upon detection of continuous defects by the vision system the automated assembly equipment would stop operation and alarm the operator of the error. Reduce wasted materials during manufacturing

- Identify nominal defects of the inner liner of a bottle cap
- Function at the required production rate of 800ppm
- Reduce defective parts making it through system
- Reduce wasted materials during manufacturing

## **Customer Results:**

The implemented vision system and controls integration provided a means of quality control for the product of the bottle caps. Additionally the vision system introduced a process that reduced the waste of material during the manufacturing process of bottle caps.

### **Overview:**

- Blob detection tools were used in the vision application to detect the presence of nominal defects in the bottle liners. Discrete communication to the machine PLC allowed for high speed part status updates and inspection counts to be displayed on the system HMI.
- Using the existing PLCs and HMIs for the assembly equipment the vision station was integrated into the system using discrete communication. The discrete communication provided a means for status updates to be passed between the machine controls and the vision control.
- Outbound Technologies provided training to the maintenance department on the operation and adjustment of the vision system.

Every owner, manager, and key decision maker is an engineer. They have all been through the ranks and learned this business before they were given the responsibility to manage it. Diversity is also a key to our success. From a technical standpoint specific areas of expertise include: High Temperature applications, Automotive Paint Finishing, Pharmaceutical Automation, Web Handling Applications, Custom Software Solutions, and Safety. As a Systems Integrator, we are a 50/50 split between Continuous Process and Discrete Automation expertise.

### **Outbound Technologies Inc.**

30026 Research Drive, New Hudson, MI 48165, USA Tel: (248)-735-5000 Fax: (248)-735-5001

www.outboundtech.com Email: MI@outboundtech.com

