

PBV10

Plastic Bottles Vision Station

The PBV10 Is the right solution when 100% plastic bottle inspection is needed. The Plug & Play station increases efficiency and improves product quality on your manufacturing line!

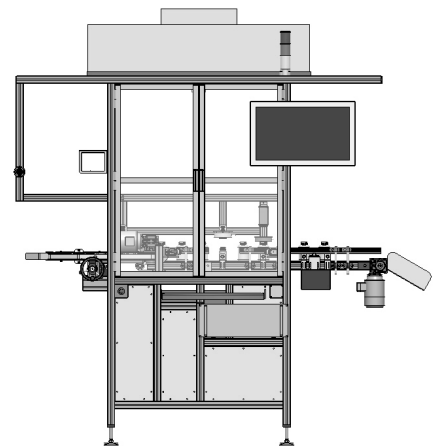


PBV10 Inspection Features

- o 6 high-resolution cameras inspection:
top, bottom and 4 sides
- o In-line inspection before packaging
and/or filling
- o Max. speed: 2 bottles per second or 7200
bottles/hour
- o Automatic detection of bottle dimensions.
Supported sizes:
Diameter 30mm – 100mm
Height 60mm – 200mm

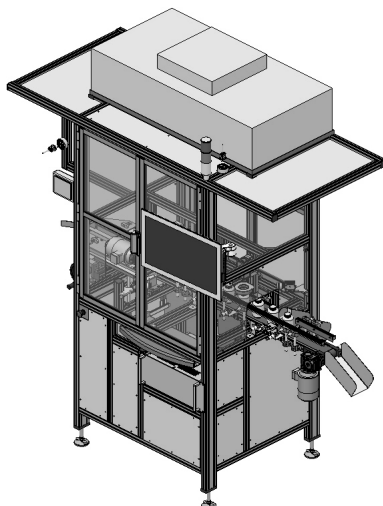
- o Top side inspection:
 - ✓ Bottle opening measurements: diameter, acircularity
 - ✓ Shorts and flashes starting 0.2mm long
 - ✓ Opening deformation
 - ✓ Spots/dirt on opening

- o Internal inspection
 - ✓ Internally illuminating from top
 - ✓ Detection and measurement of
foreign material
 - ✓ Detection of thin/thick walls



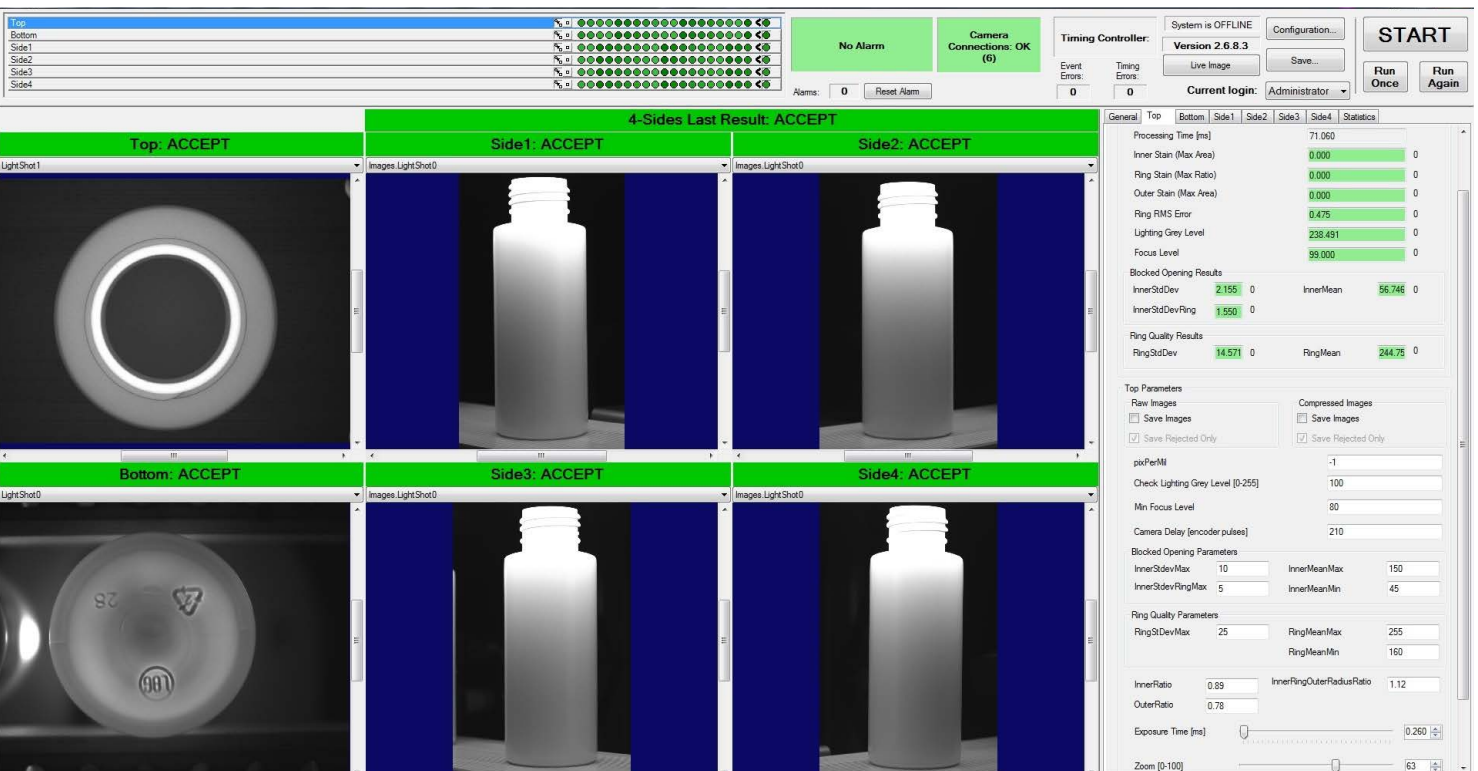
- o Side wall inspection:
 - ✓ Bad dimensions
 - ✓ Shape deformation
 - ✓ Spots/dirt on bottle body
 - ✓ Spots/dirt on bottle neck
 - ✓ Spots/dirt on thread area
 - ✓ Pigmentation / bad color

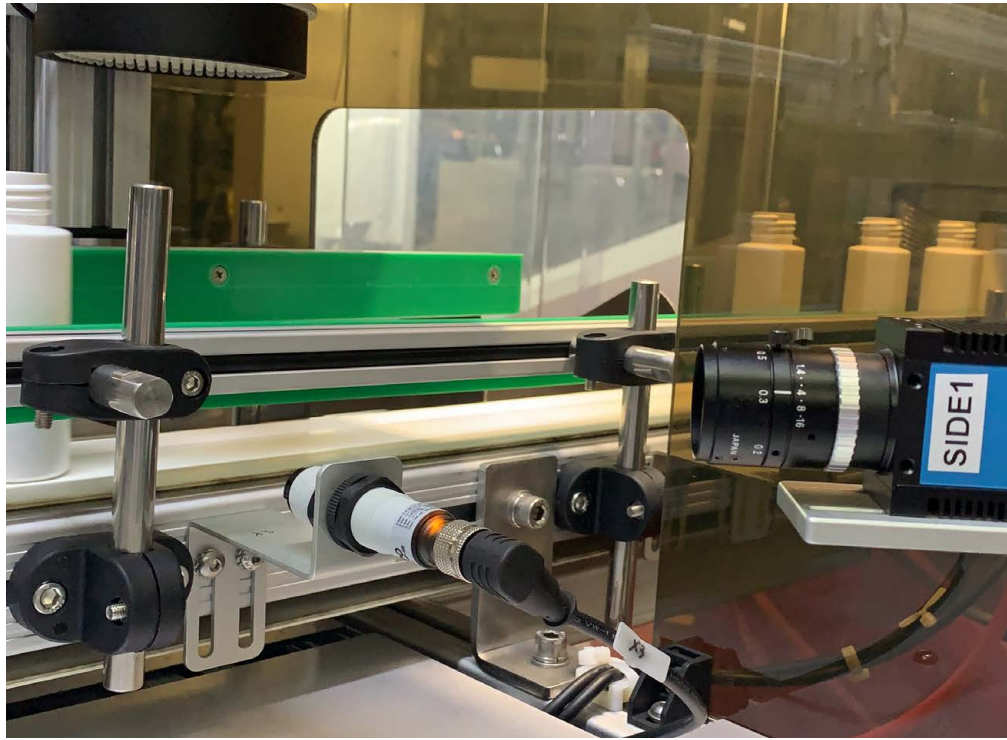
- o Bottom side inspection:
 - ✓ Marking inspection
 - ✓ Spots/dirt on bottom side



PBV10 User Interface Features

- o Live image display from all cameras
- o Defects overlay on image
- o History of last 20 inspected bottles
- o Parameters interface for inspection fine-tuning: controlling defect size, sensitivity, camera exposure etc.
- o Top camera electronic zoom/focus to adjust to different bottle heights
- o Load / save recipe with pre-defined parameters per bottle type
- o Easy calibration for new product – automatic adjustment for different dimensions, color and marking , allows flexibility for various products.
- o Multiple privilege levels: Operator, Supervisor and Administrator.
- o Password protection for supervisor/administrator levels.
- o Built-In-Test (BIT) and diagnostics for easy troubleshooting.
- o Zoom-in for detailed view of the product and/or defect
- o Image saving option, based on inspection result





PBV10 System Components

- o Fully working machine easily integrating into production line
- o Side conveyor for bottom inspection
- o Horizontal Conveyor for side / top inspection
- o Machine controller (PLC) with HMI
- o 4 side cameras
- o Bottom camera
- o Top camera with electronically controlled zoom/focus
- o Internal / external lighting for side walls
- o Internal / external lighting for bottom
- o External lighting for top
- o Protective housing for inspection area with partial ambient light transmittance for easy view of bottles movement
- o Sensors for product detection and rejecting
- o Airflow for cleaning lenses and cameras
- o Airflow for contactless products rejecting
- o Timing controller for encoder-based synchronization
- o Light controller for light strobe operation
- o Diagnostic lights