

Preform: Rotary whole surface inspection system

Description

P&S 21RWP is a high speed rotary inspection machine with 4 wheels. The system detects defects and faults including: external substances, reform, and production during the preform production of PET bottles.

The unit detects defective preforms by performing a full inspection of all aspects of the preform.

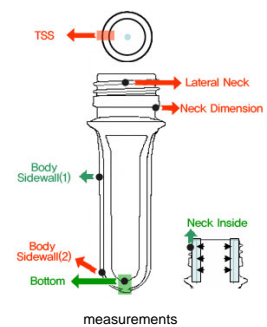
The use of high resolution CCD Camera enables detection of mouth top crack, oval and external substances (inside & outside of neck, as well as the sidewalls and bottom of the preform). The unit also conducts a dimension check for defect in gate cutting, gate, and reform stages.

Precise mechanical structure and air pressure allows a stable transfer of preforms and removes all defective units before reforming the PET bottles - thus ensuring that PET bottle production continues with minimal defect rates.

The system's self-diagnostic feature immediately alerts the operator of any problems and prevents inspection failures.



PS-21RWP



Features

Features

- Defects caused during preform production are fully scanned while rotated in the preform process.
- Detection of minute defects using a 640 x 480 camera.
- System easily shows production rate, defect rate, defect product quantity to the operator. Data may be saved by defect criteria.
- Use of LED Strobe illumination prolongs span of life and spare parts have simple structure, semi-permanent, which enables longer life-span.
- High reliability due to the self diagnostic feature in the system.
- Shutdown of the machine is possible as to prevent failure in inspection.

Benefits

- Rotary machine type with vacuum suction system - provides stable inspection operation for long periods of time.
- Uses high resolution CCD camera to improve inspection accuracy.
- Important production data, parameters, rejection and defect rates, malfunctions stored for later use.
- Use of high intensity LED stroboscope illumination extends the service lifespan of the unit.
- Operation is done via touch screen with password protection.
- Self monitoring system ensures the system is operating properly.

Technical information

- High performance Industrial PC for auditing and processing
- On-line control for container tracking
- PLC for drive and control tasks
- Runs on Windows 2000/XP OS
- Touch screen LCD

Camera and illumination

- Cameras range from VGA to 1.3M resolution
- Analog and Digital cameras
- CCD (CMOS optional)
- Digital image process technology is proprietary
- High performance LED and controller
- consistent illumination of objects
- low heat
- long half-life
- Low power, low operating costs



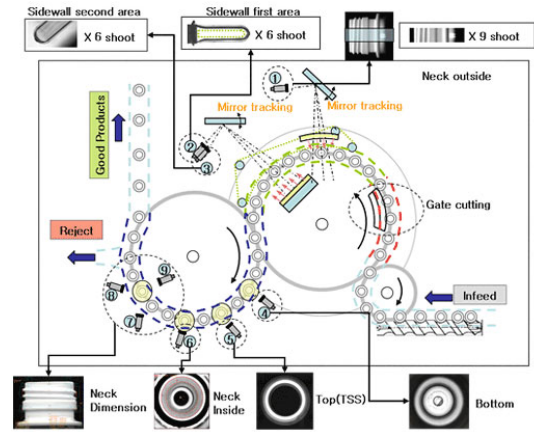
Specification

Container	PET Bottles Preform in various fields
Capacity	Max 30,000 BPH
Inspection unit & Accuracy	Sealing surface particles: min 99.5% detectable for 0.5 mm Lateral Neck in & out wall particles: 98% detectable to min. 0.5 mm Bottom particles: min 99.5% detectable for 0.5mm Sidewall particles; min 99.5% detectable for 0.5mm
Utilities	3Phase 3Wire, 220V, 60Hz
Dimensions	1750 x 1850 x 2100mm (WxDxH)
Weight	Approx : 3,000 kg
Container	PET Bottles Preform in various fields
Capacity	Max 30,000 BPH
Inspection unit & Accuracy	Sealing surface particles: min 99.5% detectable for .02" Lateral Neck in & out wall particles: 98% detectable to min. .02" Bottom particles: min 99.5% detectable for .02" Sidewall particles; min 99.5% detectable for .02"
Utilities	3Phase 3Wire, 220V, 60Hz
Dimensions	68.9" x 72.8" x 82.7" (WxDxH)
Weight	Approx : 6,614 lbs

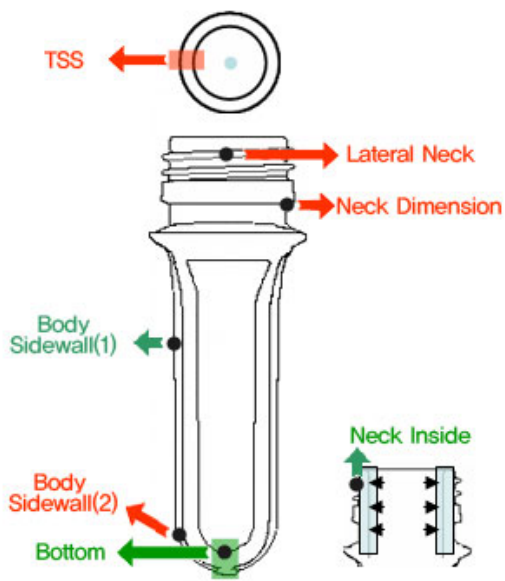
Pictures



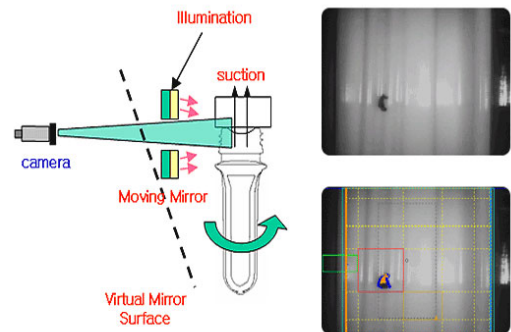
P&S 21RWP



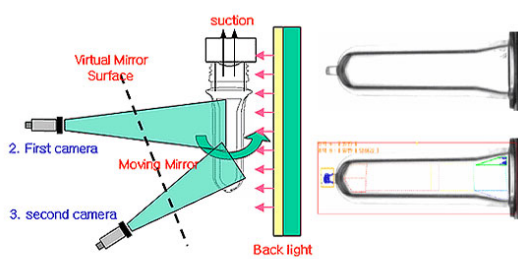
overview



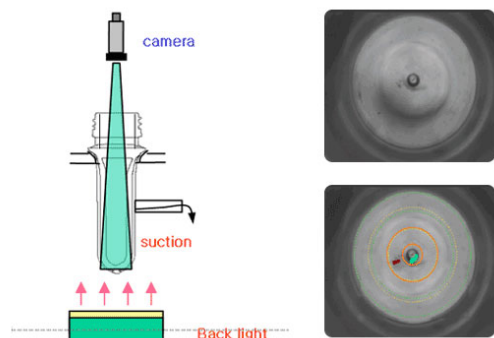
measurements



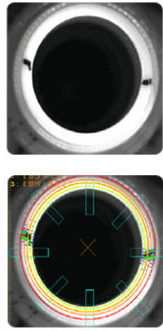
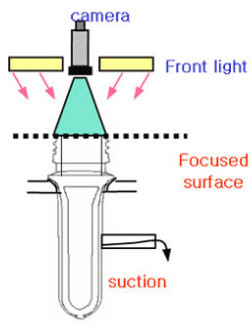
neck outside



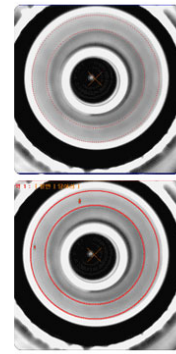
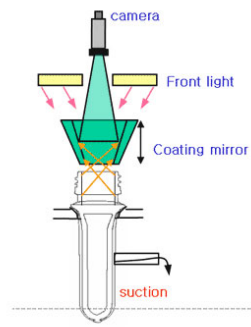
body sidewall



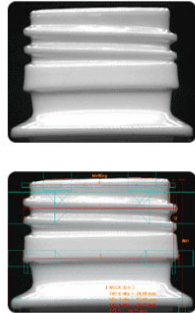
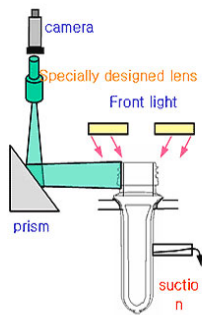
bottom



top sealing surface



inside neck



neck dimension