

PREWATCHER® 4

INSPECTION OF PREFORMS

The PreWatcher® 4 is the new standard in quality control of **transparent and opaque preforms**. Within its **slim and space-saving design**, it still performs a comprehensive inspection – no detail will escape its **17 cameras**. In addition, the system can be adjusted to different preform sizes quickly and efficiently, and the collection of reference samples has never been easier!



THE NEXT STEP IN
PREFORM INSPECTION

17 cameras

performing a comprehensive inspection, speeds up to **100,000 preforms per hour**, and a **3m² (32 ft²) footprint** – these are the main features of the Pre-Watcher® 4. The preform inspection system provides you with many advantages for your everyday production, incorporating an innovative adjustment system for easy changeover to different preform sizes. Change parts are unnecessary.

The PreWatcher® 4 can either be used offline for re-sorting or inline, installed directly behind the injection molding machine. With its second ejection unit, **reference samples can be easily collected, even while the system is in inspection mode.**

Process safety in everyday production is ensured through the pre-installed INTRAVIS inspection software. Extensive user administration capabilities are included, guaranteeing that each operator can only change settings for which he or she is authorized.

ADVANTAGES

- \\ Comprehensive preform inspection with no blind areas
- \\ Several alternatives for controlled ejection of preforms
- \\ Switchable illumination (white and infrared light) for inspection of both transparent and intensely colored preforms
- \\ Inspection of opaque preforms (e.g. for milk and cosmetics markets)
- \\ Further processing of preforms is possible via outfeed rail handling

INSPECTION CRITERIA – GEOMETRY / BODY

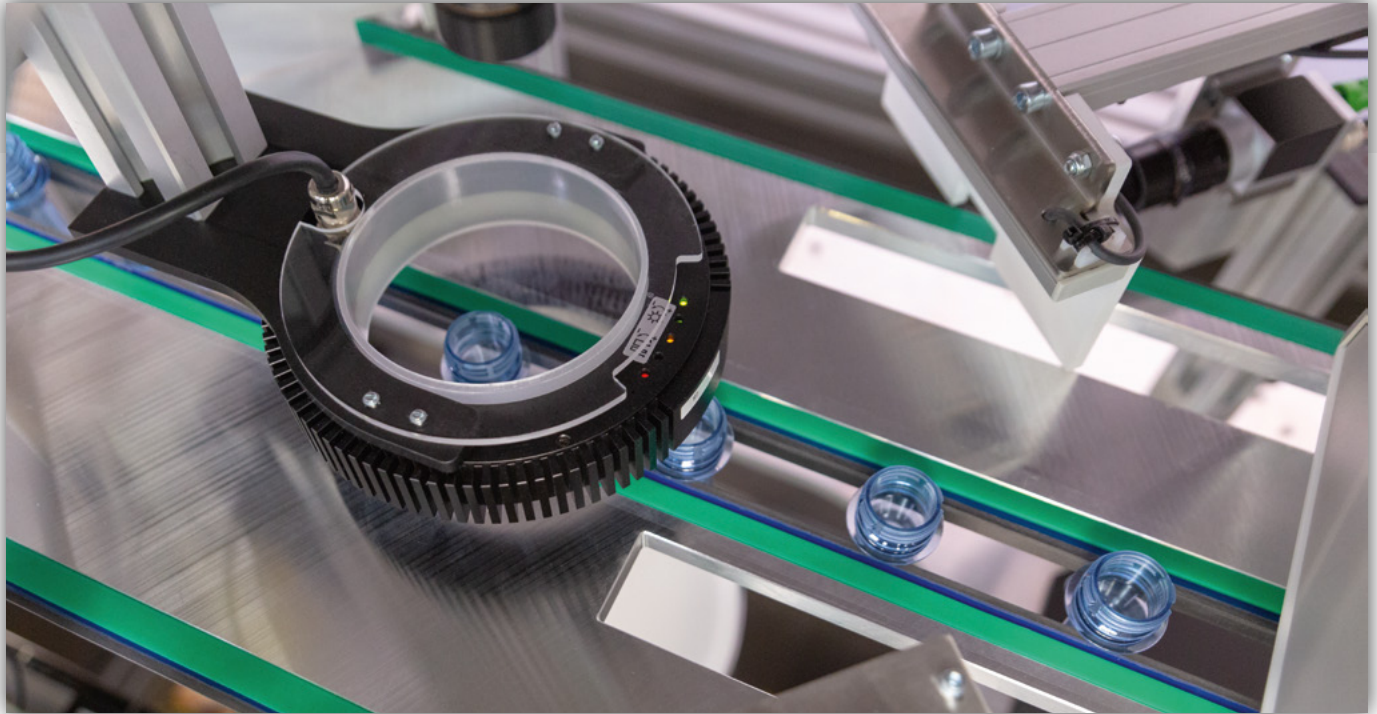
- \\ Length, shape, diameter
- \\ Short shots, gate length
- \\ Unmelted material, contamination
- \\ Bubbles, burn spots, oil marks

INSPECTION CRITERIA – CAVITY NUMBER READING

- \\ Sorting-out of preforms according to previously specified cavity numbers
- \\ Cavity number related statistics

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INSPECTION CRITERIA – COLOR

- \\ Color and intensity deviations (ΔL^* , Δa^* , Δb^*)
- \\ UV measurement (presence of UV blocker)
- \\ IR measurement (presence of nylon)

INSPECTION CRITERIA – TOP SEAL

- \\ Diameter and Ovality
- \\ Flash
- \\ Scratches and notches on the top sealing surface
- \\ Neck support ring defects

INSPECTION CRITERIA – GATE

- \\ Grooves, Holes
- \\ Contamination in the gate area

INSPECTION CRITERIA – THREAD AREA

- \\ Contamination
- \\ Thread dimensions
- \\ Neck support ring defects

Inspection speed

- \\ Up to 100,000 preforms / hour

Preform dimensions

- \\ Diameter 10-48 mm (Body)
- \\ Height 40-162 mm

Power requirement

- \\ Rated voltage 3/PE AC 400-480 V, 50/60 Hz*
- \\ Rated current 10 A

Compressed air requirement

- \\ 6-8 bar (87-116 PSI), oil-free, filtered

* All systems are designed to be UL and CE compliant