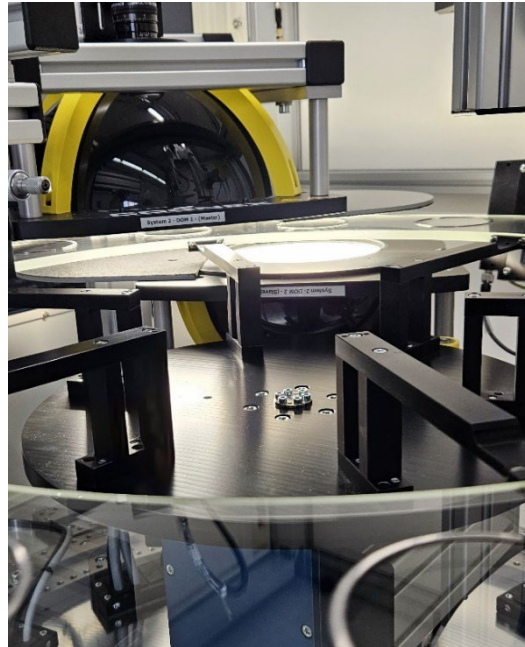


The smart solution for 100% inspection of flat components

Efficiency, precision, and reproducibility are critical in industrial quality assurance, especially for functional or safety-relevant components such as piston rings. With AIT Orbit, we present a powerful and cost-effective inspection system specifically developed for the fully automated inspection of flat components (from both the top and bottom sides).

Based on state-of-the-art AI-powered machine vision combined with rule-based inspection algorithms, AIT Orbit enables reliable detection of surface defects such as pores, shrinkage cavities, rust, grinding defects, and inclusions at throughput rates of up to 75 parts per minute.

The robust glass rotary table system can be flexibly integrated into a wide range of production environments and ensures consistent inspection quality independent of the operator. The investment pays off quickly: in most cases, the system achieves payback in less than 1.5 years.



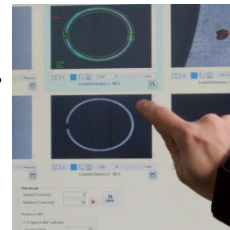
Technical Highlights & Benefits

- Automated 100% inspection for piston rings and other flat components
- AI- and rule-based defect detection, e.g. pores, shrinkage cavities, scratches, rust, and edge chipping
- Based on trevista technology (separating image information into brightness and topography)
- Reliable, objective defect detection with a minimal false reject rate
- Suitable for almost all surface types
- Universally applicable for flat, position-stable components up to 150 mm across all industries
- **Ideal for piston ring inspection** according to DIN ISO 6621 for uncoated, chrome-plated, nitrided, or PVD-coated surfaces



Switch from the magnifying glass to smart inspection >>>

[>>> Watch the video now!](#)



We show you how to improve quality while reducing costs.

Get a no-obligation consultation now: sales@ait.de