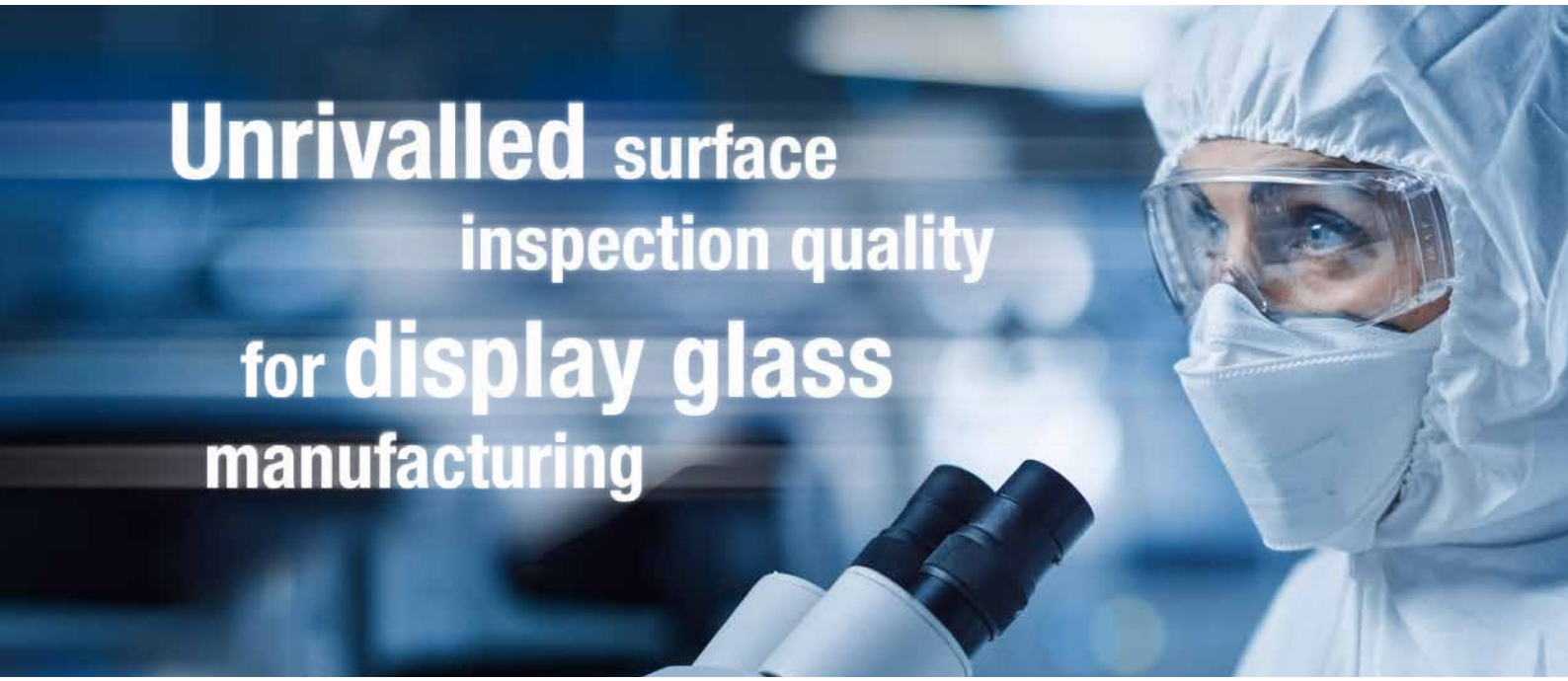
100% optical ultra-thin glass inspection

Product Info

ISRA VISION

Automatic Inspection of ultra-thin glass

Unique solution 100% ultra-thin glass inspection at line speed: FPM-Smart



Exceptional defect detection for flawless glass

The constant trend towards special applications for ultra-thin display and cover glasses introduces increasing challenges for quality and production yield. To meet the demanding customer requirements and boosting manufacturing efficiency while simultaneously reducing cost, an ultra-reliable thin glass quality assessment is key.

Highest precision. Fully automated.

ISRA VISION´s unique, innovative and comprehensive portfolio of products for optical inspection of glass products is perfectly suited for almost all production steps in the glass industry: from inspecting the glass ribbon through to the thinnest display glass; from processing sheet glass to business intelligence.

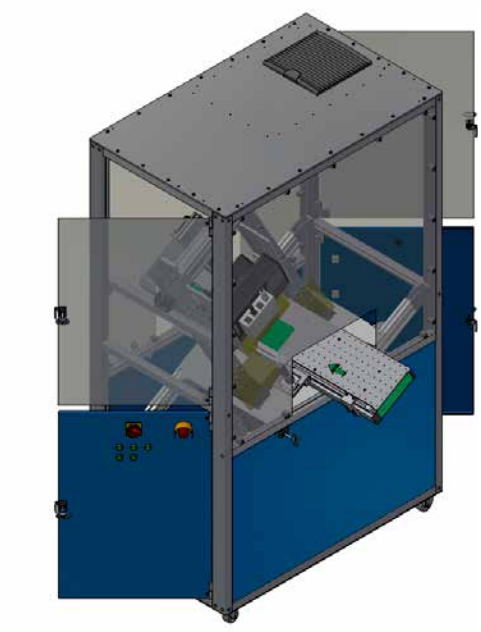
FPM-Smart is a high-end “all-in-one” surface inspection system especially dedicated for the inspection of finished or pre-finished parts like cover glasses, UTG foldable glasses, or advanced transparencies. The FPM-Smart includes advanced features like contactless conveying and inspection of complex parts, free form shape inspection algorithms, and multi-zone smart inspection (e.g. zone definitions, printing, etc.).

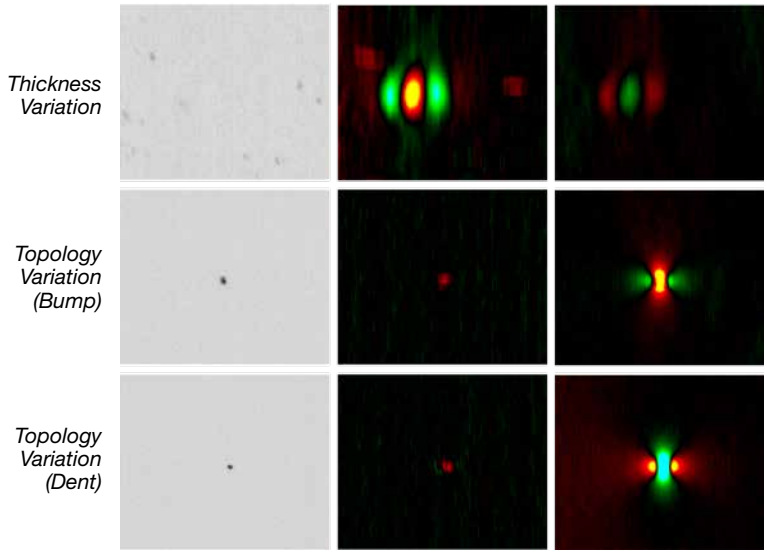
Inspection systems do not only detect defects, but also help to improve processes and optimize yield. They pinpoint where and why glass defects and surface defects occurred. In this way, you get important information enabling you to significantly improve production and thereby achieve better result

Advantages

- Automatic optical inspection of ultra-thin glass at line speeds
- Complete solution from conveyor to inspection to process monitoring
- Ship only defect-free material to your customer and avoid customer claims
- Improve quality while simultaneously ensuring consistently high standards and process optimization
- Reduce rejects prior to assembly with reliable defect detection and classification of critical issues
- Partner with ISRA for the best results
- Global ISRA service available from the start
- More than 2000 glass inspection systems in operation
- Your right partner for operating and managing many inspection systems on parallel production lines

FPM-Smart





Material to be inspected	Ultra-thin glass (flat, washed and dried, print)
Inspection width (incl. drift)	200 mm
Inspection cycle	approx. 1 sec per smartphone glass (depends on the actual size)
Glass thickness	0.03 mm to 2 mm
Glass color / transmission	> 80 % for white light
Environmental conditions	Temperature (at illumination / camera beam): 20 °C ~ 30 °C Humidity: 40% ~ 50%
Typical defects to be detected	Scratches, point defects, etching defects Inclusions, bubbles, edge chipping Finger prints, dirt Dents, bumps
Conveyor speed	2.5 to 9 m/min
Lateral Resolution	20 µm/px
Inspection Channels	TBF (Transmission Bright Field) RBF (Reflection Bright Field) RDF (Reflection Dark Field – advanced scratch) T Dyn. Moiré (Transmission Dynamic Moiré) R Dyn. Moiré (Reflection Dynamic Moiré)
Conveyor	High precision contactless conveyor included
Dust control	Recommended installation location has to be better than class 1000 clean room
System Dimension	Approx. 1300 mm (Length) x 844 mm (Width) x 1832 mm (Height)

Optimize your ROI with the technology leader **ISRA**

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