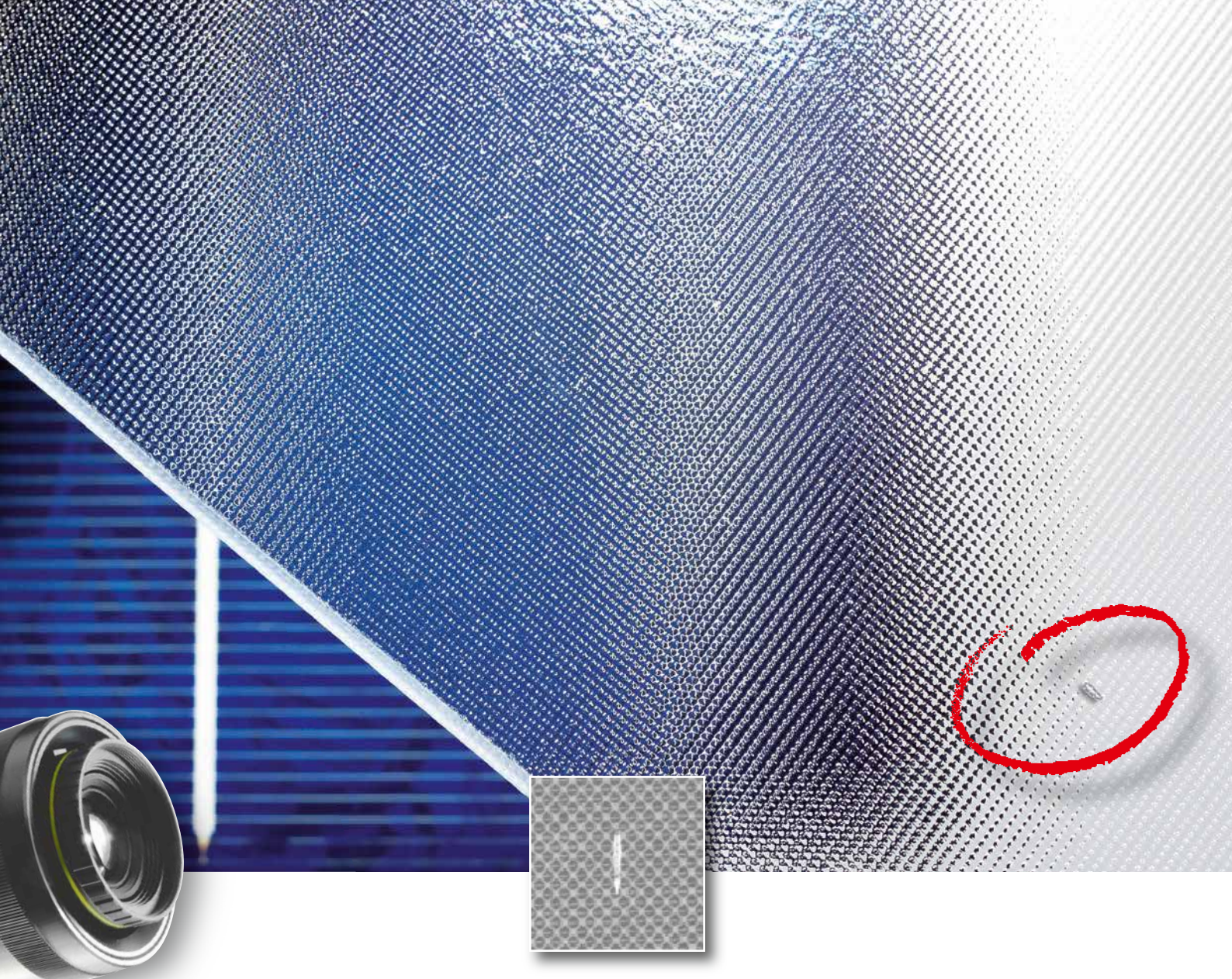


Reduce Waste. Increase Line Yield.

Innovative Inspection Technology for Pattern Glass

Make Invisible Defects Visible

Passion for Glass

Driven by Competence.
Powered by Innovation.

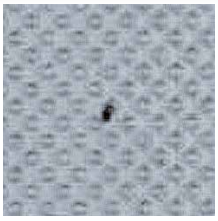
ISRA VISION

Fast ROI due to Innovative Inspec

100% Optical In-line Pa

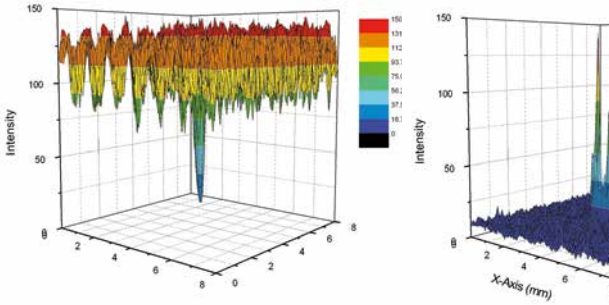
Make invisible defects visible: like other glass manufacturing processes, the production of pattern glass substrates is subject to defects. However the requirements to detect and distinguish them are significantly more challenging. Even the smallest defects like stones and open bubbles must be recognized and differentiated reliably. This is where all other vision systems can deliver only limited results.

Automated optical real-time inspection that matches: PATTERNSCAN-Ribbon for the pattern glass ribbon, and PATTERNSCAN-Sheet for solar glass sheets, featuring reliable detection, classification, and distinction of even tiniest defects. Both systems help to guarantee highest quality of pattern glass according to given market standards.



Stone

Open b



PATTERNSCAN-Ribbon is the fully automated system for the optical inspection of the patterned glass ribbon. It is designed to do it in the most effective way and can be located directly after the furnace and cooling zones. The requirement to detect and distinguish defects – typically open and closed bubbles, stones and knots – in this harsh environment is challenging. Nevertheless PATTERNSCAN does the job rapidly, reliably, and efficiently.

Features

- Advanced, learning defect classification
- Defect cluster analysis
- Detection of:
  open bubbles, closed bubbles, elongated bubbles,
  stones, scratches, inclusions, knots, threads, and others
- Distinction between:
  open bubbles/closed bubbles, stones/bubbles
- Suitable for connection with cut optimizing system

Overall Benefits:

- Best line yield due to advanced defect classification
- Process optimization by early intervention

ction Technology for Pattern Glass

attern Glass Inspection

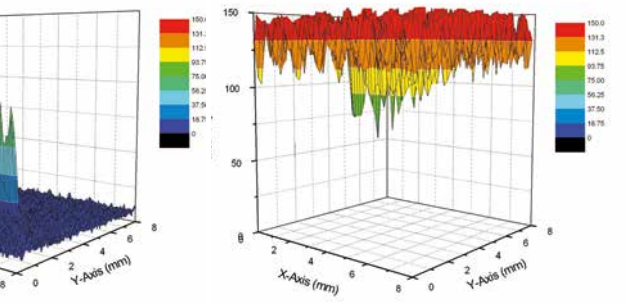
Multi-View, Multi-Mode, Multi-Dimensional: another ISRA innovative proprietary technology which enables the successful recognition of all defects in the glass, on the glass and along the glass edges, as well as in the glass coating. The result: increased profitability, optimized processes, all together with reduced operating costs.

The return on investment is reached in the shortest times. This is due to fast installation and commissioning and shortest ramp-up times.

Get YOUR key to the future – Ask for the details!

bubble

Bubble



- Low operating costs and increased profitability
- Multi-mode LED-illumination for a vast increase in performance, despite a significant reduction in hardware

PATTERNSCAN-Sheet the inspection solution for patterned sheet glass. To ensure defect-free solar cover glass it usually installed right after the washing zone. Based on nearly the same technology features as the inspection system for ribbon, and due to the ultra-fast pattern-switching, multi-mode LED illumination, with only a single camera or bank of cameras, a theoretically unlimited number of differently illuminated views can be generated. The information from different views is used to achieve reliable and advanced defect classification. The result: defects previously classified as invisible and undistinguishable become visible.

Features

- Applicable for float and sheet glass
- Individually switchable LED's
- Certified detection performance
- Non-clean room inspection down to 90 µm

Save Costs and Maximize Quality

Innovations for Automated Optical Inspection

We are the innovators in optical inspection. Best practice. Best system. Best service.

For over three decades, ISRA VISION has become a leading manufacturer of highly accurate automated optical quality inspection systems.

More than 10,000 successful applications reference our sustainable experience in the field of machine vision products – and our ability to innovate.

Today our products are operating worldwide in such industries as glass, plastics, foils, print and automation. It is our goal to set system standards for total process control in these industries.

Customers choose ISRA for the ability to develop products consistently to their requirements. More than 900 employees at 25 locations worldwide are working to contribute to your success.

Your global partner for surface inspection.

We offer our experience and a highly qualified team of experts to design and implement solutions for advanced applications.

We assure that our mission continues beyond our shipping dock. Just challenge our Customer Support and Service Center (CSSC).

We guarantee excellence to our customers – from consulting to service, from tailored solutions to worldwide support. We can make your business more competitive.

Challenge Us. Inspect to Control – with ISRA VISION

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