

The Industry Standard for Float Glass Inspection **FS-5DXIN**

NEW

Now with New Features and High-End Inspection





Driven by Competence. Powered by Innovation.



Helping you to maintain a position as quality leader in glass production while market requirements are changing and quality requirements toughening:

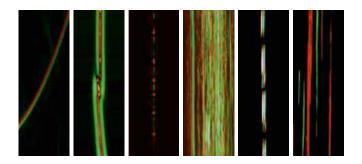
FS-5DXIN – the industry proven standard for float glass inspection with highest performance in defect detection, classification accuracy and optical measurement has now been upgraded and improved. **Adaptive Sensitivity** – when a rising concentration of dirt on the ribbon could cause a risk to the performance, the system warns you and can either recommend or automatically adapt sensitivity settings making sure no piece of glass is uninspected.





Key new features include:

More Tools to Control the Optical Quality enabling you to detect even low-contrast reams, diagonal ream and thinnest cords. Precise and reproducible measurement of the optical power – a unique capability of the FLOATSCAN family due its patented Moiré technology – can now also be used to detect more types of optical defects. Identify problems with your glasses optical quality early on to reduce customer claims and get a deeper understanding of your production process.



Improved Accuracy – defect core size measurement has become twice as precise. This more accurate information on the severity of quality related defects allows you to increase your line yield without risking any customer claims.

Coating Color Monitoring – this new option provides an in-time quality feedback on your coating quality that helps you to identify process problems early on and increase your yield rate.

Upgraded Hardware and Components

Usage of the newest generation of ISRA's line scan cameras with higher speed as well as the compact high power LED Illumination and a even more maintenance friendly mechanical design ensure the system's long-term stability and minimize maintenance efforts and inspection down times.

Many of these features are also available as upgrades to existing FLOATSCAN-5D systems!









Float Glass Quality Assessment At Its Best

All-in-One: More than 30 years of experience ... and top-of-the line innovations ...

Considering the pressure of increased global competition, items such as efficiency and productivity maximization are key factors to maintain a competitive edge. Success depends heavily on achieving consistent and reliable operation by reliable monitoring of float glass production. This is where the **FLOATSCAN** product line helps and why the top float glass producers worldwide have relied on ISRA VISION inspection solutions for more than 30 years.

The improved **FLOATSCAN** product line opens up new potential in float glass processing and provides highest benefits.

Accuracy and ease of use - meeting market demands:

FLOATSCAN product line – the best tools to perform continuous process and production optimization for flat glass production. Reliable, experienced, and flexible for any requirement:

Automotive float glass Standard architectural float glass Advanced architectural float glass Thin float glass

Get YOUR key to the future – Ask for details.

For Best Product Quality

Make your production both more productive AND cost-effective.

FLOATSCAN supplies glass manufacturers with critical information, enabling them to significantly improve their production and thereby achieve greater success. Features include

Uniquely highest classification performance Inspection for coating defects Full tin defect detection and discrimination Defect depth measurement Optical measurement

Ready to increase your production efficiency? Get the key to the future – Inform YOURSELF. Our expert team is available to support you.

360° value creation that pays back on your investment, even at the basic level! Select to YOUR needs:

The new **FLOATSCAN** generation is available in different product categories to match the different quality needs in float glass processing.

FLOATSCAN-Basic

Standard inspection design for detection of distorting and nondistorting defects

FLOATSCAN-Premium

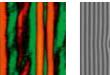
Integrated precision optical measurement

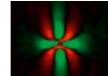
FLOATSCAN-5DXIN



Ultimate inspection, unmatched classification, correct quality decisions and defect type information













Take Your Production Efficiency Up to Its Maximum

Facts you can rely on - technological and valuable:

Best optical measurement capability - Moiré technology

- New evolution of the moiré technology for unmatched detection and measurement of optical defects
- Assures reliable optical float glass quality for automotive industry
- Inspection comparable to established offline methods
- Tolerant to thickness, transmission and color variation
- No need for calibration
- Precise measurement via multi-filtering
 - Optic fine line (narrow reams, chemical reams,...)
 - Automotive (draw lines, ...)
 - Zebra defects (wide lines, ...)

The basis to generate optimum quality information: Unique, patented Multi-View Multi-Mode technology

- ALL-IN-ONE camera system design:
- A single camera bank combined with switchable LED illumination generates different views to reliably distinguish between defects
- The combination of FIVE OPTICAL CHANNELS in one system
- Inspection tolerance to pass-line deviations
- Low contrast defect detection

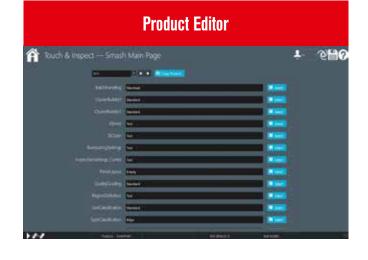
Advanced multi-step classification technology: excellence in defect classification – beyond inspection

- Set-up, commissioning and tuning designed for operators not scientists – easy to understand and to operate
- Simple, fast and efficient, just a few clicks to more qualified yield:
 - Type classification based on a huge feature set
 - Easy, reliable, rule-based for simple relationships
 - Learning glass inspection by automatic and trainable QUICKTEACH classification, gathering existing experience for process improvement
 - Severity Classification
 - Easy defect related classifier fine tuning

Optical measurement The Industrial Standard for Automotive Glass







The Key to Success and Highest Productivity

Quality index Increase of Saleable Production







Quality index to optimize yield

- Automatic quality grading into user adjustable quality levels
- Grading criteria based on defect type, counts and severity
- Direct interfacing and transfer of quality index with / to marking unit

Advanced online process analysis for operators

 New online, flexible, and intuitive graphical user interface for clear views to support easy and fast analysis of actual glass processing

Ground-breaking system design based on simplicity and robustness as key factors

 Maximized availability and minimized maintenance effort

Easy integration and fast start-up:

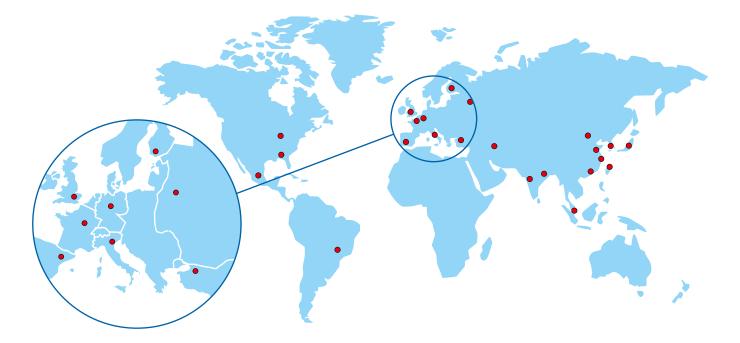
- Predefined parameter set-up
- Certified start-up approach
- Standardized interfaces such as for
 - Cutting control and optimization
- Glass quality marking
- Standard machines (Bottero, Millennium, Grenzebach...)

The FLOATSCAN product line at a glance

- Moiré technolgy as industry standard certified optical measurement of high-quality glass
- High-performance classification guarantees shortest payback
- Advanced LED-illumination technology
- Over 1000 systems installed worldwide



Innovations for Automated Optical Inspection of Glass



We Are the Innovators in Optical Inspection. Best Practice. Best System. Best Service.

For over two 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, packaging, 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 consistent with their requirements. More than 800 employees at 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 starts beyond our shipping dock. Just challenge our Customer Support Center.

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

Challenge Us. Inspect to Control – with ISRA VISION

ISRA VISION

Germanv

Tel.: +49 (2366) 930 00 Fax: +49 (2366) 930 02 30 UK

Tel.: +44 (1322) 520 410 Fax: +44 (1322) 559 419

Turkey Tel.: +90 (212) 285 97 45 Fax: +90 (212) 285 97 43

Iran Tel.: +98 (21) 226 467 02

Fax: +98 (21) 226 467 02 Fax: +98 (21) 226 467 04

www.isravision.com

Spain Tel.: +34 (93) 589 71 79 Fax: +34 (93) 589 71 79 France Tel.: +33 (0) 155 681 250 Fax: +33 (0) 155 681 000 Belgium Tel.: +32 (2) 652 38 66 Fax: +32 (2) 652 37 28

Tel.: +32 (2) 652 38 66 Fax: +32 (2) 652 37 28 Italy Tel.: +39 (0464) 490 603

Optimize your ROI with the technology leader ISRA

Tel.: +7 (499) 418 00 32 Fax: +7 (499) 418 01 36 USA Tel.: +1 (770) 449 77 76 Fax: +1 (770) 449 03 99 Brazil Tel.: +55 (11) 3476 11 32 Fax: +55 (11) 3476 11 32

Russia

P.R. China Tel.: +86 (22) 233 059 83 Fax: +86 (22) 233 050 90

Korea Tel.: +82 (31) 8069 7300 Fax: +82 (31) 8069 7303 India

Tel.: +91 (20) 267 410 00 Fax: +49 (2366) 930 02 30 Japan Tel.: +81 (45) 534 99 11 Fax: +81 (45) 534 99 29 Taiwan (R.O.C.) Tel.: +886 (3) 250 01 48 Fax: +886 (3) 250 01 49