



## Case Study

How Guardian Glass increased the productivity and cost-effectiveness of its float glass production



### Customer & Challenge

Quality control plays a central role in the production of float glass to ensure flawless products and meet the highest customer requirements. This is also the case at Guardian Glass Steklo Ryazan, a leading manufacturer of high-quality float glass for architectural applications.

With its previous inspection solution, it was harder for the company to reliably detect the smallest defects such as bubbles, tiny stones and scratches. In addition, harmless deposits and production residues on the surface were difficult to be distinguished from actual defects. In the past, this led to increased scrap. To increase productivity and profitability, Guardian Glass was looking for a solution that could reliably detect and classify even minimal production deviations.



### The Solution

#### ISRA VISION FLOATSCAN-5DXIN

- Precisely detects and classifies even minimal defects, regardless of thickness, color and light transmission of the glass
- Determines the defect level to distinguish between defects in the glass and harmless deposits
- Combines five optical channels for inline inspection in one sensor
- Improves detection and classification of bubbles/stones based on patented cross-darkfield technology
- Proven system - industry standard
- Remote installation at the customer's site can be performed by the customer

# FLOATSCAN-5DXIN



"Immediately after commissioning, we found that the new system provides significantly better fault detection and classification than our existing systems. In addition, operation and configuration have become much easier. The productivity and profitability of our float glass production has increased enormously. In addition, we now have a more realistic assessment of our process quality and make better decisions for optimization."

Sergey Khaninev, QM & CI Manager  
Guardian Glass Steklo Ryazan

## Customer Benefits



### 100% optical inline inspection in float glass production – with highest precision

The FLOATSCAN-5DXIN inspection system detects and classifies typical distorting and non-distorting glass defects. Even the smallest inclusions, bubbles and stones in the glass, scratches and damage are precisely identified.



### Data enables conclusions to be drawn about process parameters

The data from the FLOATSCAN-5DXIN inspection system is continuously evaluated. This allows correlations to be made between production deviations and process parameters. It also gives Guardian Glass a more realistic assessment of process quality as a basis for optimization.



### Less waste, higher yield and optimized overall productivity

At Guardian Glass, the introduction of the system reduced the production of rejects in float glass manufacturing because the determination of the defect level can reliably distinguish surface production residues from actual defects in the glass ribbon



### Installation via remote instruction for the first time

For the first time, the installation of the FLOATSCAN system took place completely via remote instruction. For this purpose, Guardian Glass received a detailed installation manual and was accompanied and supported by ISRA VISION experts during all steps via video conference. Due to the positive experience, the company would consider an installation with online support again in the future.

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