
Release: Nr. 713, 22.11.2018

Contact: Britta Becker

E-Mail: bbecker@isravision.com

Phone: +49 / 2366 / 9300-241

One of China's most successful providers of high quality float glass turns to ISRA's FLOATSCAN Thin Superior for quality assurance

Challenging accuracy: ISRA offers 100% inspection for ultra-thin glass – precise, fast, stable

Darmstadt/Herten (GER) / Huagung (CN) – Ultra-thin glass has to meet the highest quality standards due to its sophisticated application areas like electronics and thin film photovoltaics. Chinese glass manufacturer CTIEC Co. Ltd. chose ISRA's FLOATSCAN Thin Superior system to automate the quality control in their ultra-thin glass production. The impressive result: maximum process quality and significantly reduced customer complaints within weeks.

Material thickness of 0.5 mm (generation size 8.5) and even below increases the quality impact of defects on ultra-thin glass tremendously. Incorporated in smartphones and tablets as well as flat-screen TVs and PC-monitors, the glass quality directly influences the performance of the screens. Beyond that, ultra-thin glass also serves as display cover glass, always being directly in the user's line of sight. In the photovoltaics industry, flawless ultra-thin glass plays a key role for the efficiency of thin film modules. To meet the demanding standards for these products, consistent 100% defect detection of the glass components has become mandatory. Since defect sizes are typically in the 0.05 mm range, the necessary high level of accuracy cannot be provided by manual inspection.

Perfect match in process stability and accuracy

Being a satisfied ISRA customer for years, the company turned to the Germany based market leader in surface inspection for

ISRA VISION AG
Industriestraße 14
64297 Darmstadt
Germany
Tel. : +49 (6151) 948-0
Fax: +49 (6151) 948-140
info@isravision.com



Release: Nr. 713, 22.11.2018

Contact: Britta Becker

E-Mail: bbecker@isravisision.com

Phone: +49 / 2366 / 9300-241

the solution. "Quick and correct assessment of the glass quality and effective support in adjusting the process for best results is what ISRA's FLOATSCAN Thin Superior system provides to us. It perfectly matched our high requirements regarding accuracy and system stability", says Yu Jiahong, general manager at Anhui Huaguang Photoelectricity Materials Technology Group Co.,Ltd, a fully owned subsidiary of CTIEC. Beyond quality and process monitoring, the company uses the gathered inspection data as documentation for tracking their products' quality evaluations. Information about the individual products can be provided within seconds. All relevant defects like bubbles, stones, top or bottom tin, knots and scratches are reliably detected. The system automatically classifies all findings in type, size, and position. The exact identification of defects enables continuous process optimization, the comprehensive defect data makes root cause analysis fast and easy.

Precise defect detection and fastest deployment

ISRA combines multi-view imaging and the patented Dynamic Moiré technology with a new switchable high power LED to achieve best inspection results. The system uses multiple camera channels to achieve best defect detection and classification rates. Monitoring the optical power across the full glass ribbon includes a distortion channel as well as detection of optical lines, cords and monitoring of the Zebra angle. The transmission channel offers precise core size measurements and ISRA's patented cross dark field illumination to detect scratches and core bubbles of minimum size, while a reflection channel measures the defect depth and recognizes top and bottom tin. By sending the data to a line control system, FLOATSCAN Thin Superior enables automated sorting of the sheets based on quality. The simultaneous remote monitoring of inspection results in a control room, allows CTIEC to immediately benefit from the gathered information. Within two months, the FLOATSCAN Thin Superior

ISRA VISION AG
Industriestraße 14
64297 Darmstadt
Germany
Tel. : +49 (6151) 948-0
Fax: +49 (6151) 948-140
info@isravisision.com



Release: Nr. 713, 22.11.2018

Contact: Britta Becker

E-Mail: bbecker@isravision.com

Phone: +49 / 2366 / 9300-241

system was fully operational and generated first positive results like process improvements and easier and more reliable quality monitoring. The system's real time feedback allows for optimizing the forming process and taking immediate action when repeating defects occur. With the combined advantages of thorough defect detection, sustainable process optimization, and quick deployment, ISRA's FLOATSCAN Thin Superior realizes a fast amortization and an attractive return-on-investment time. CTIEC Ltd. Co. is already planning to continue the partnership with ISRA by ordering other solutions for thin glass inspection and also systems for further applications.



ISRA VISION AG
Industriestraße 14
64297 Darmstadt
Germany
Tel. : +49 (6151) 948-0
Fax: +49 (6151) 948-140
info@isravision.com

