

USING SCANNERS IN QUALITY CONTROL

How Weha-Therm has reduced its complaints rate

There is always a risk of glass breakage as a result of production errors, extremely fine cracks and stresses in glass. This is why glass manufacturers are increasingly relying on automatic quality checking – including the insulating glass producer Weha-Therm. Find out here why this company from Lower Bavaria has been working together with Softsolution since 2012 and today uses two scanners.

At Weha-Therm's Hutthurm location, two Softsolution LineScanners check glass for all quality defects. One of the scanners in the glass manufacturer's production line is used to check the glass quality in the LISEC KSR glass edging machine, and the second to check individual glass panes in the LISEC insulating glass system. "Thanks to the LineScanners, we have succeeded in significantly reducing the complaints rate. And our employees are also satisfied with the results", reports Alfons Freund, Managing Director at Weha-Therm (www.wehatherm.de) and explains why: "Previously, hardly anybody was keen on assuming responsibility for the assembly of large display windows, because the risk of error was simply too great. Since we've been using the LineScanners, however, our employees on the production lines have felt far more comfortable, while the fear of assembling large window panes has evaporated". Alfons Freund and his team are also satisfied both with the simple handling of the scanners and the partnership-based cooperation with Softsolution.

In addition to the checking for scratches, bubbles, inclusions and impurities on and in tempered safety glass and laminated glass, the parallel-light technology of the LineScanner can also be used to check individual sheets in the same structure as well as assembled insulating glass windows. Furthermore, it is possible to define different parameter settings for tempered safety glass, laminated glass and float glass as well as a pairwise comparison for 2-fold and 3-fold ISO glazing. Finally, it is now possible to check the total insulating glass assembly via a data connection to the ERP System, as well as checking the glass thickness and coating side – and with tempered safety glass, even the total warpage.

Constant quality ensured

According to information from the glass manufacturer, use of the scanners enables potential error sources to be detected and stopped at an early stage, while the automated checking provides a constant quality of control. This is also confirmed by Markus Stefan, Sales Manager at Softsolution: "Thanks to the scanners, the glass control process is significantly more stable and more reliable than a manual inspection.

Markus Stefan (on the left), Sales Manager at Softsolution, handing over the LineScanner to the Managing Director of Weha-Therm, Alfons Freund.



Foto: Softsolution



Photo: Softsolution

With the latest generation of LineScanners, it is now possible to measure the edge stress of glass panes. In addition, tempered safety glass (TSG) can also be tested for anisotropies.

This means that our customers can supply their customers with a constant glass quality. Since defective glass is discarded in the production stage, this reduces both the return rate and the considerable effort involved in dealing with complaints."

Highly versatile systems

Thanks to diverse setting options for the LineScanners as well as the straightforward operation and intuitive fine adjustment functions, the systems can be easily handled. Furthermore, the commissioning and the training of employees on the systems can be swiftly carried out. Since each type of glass presents its own quality demands and glass manufacturers want to define their own quality, our LineScanner developers are continually working on expanding the technical functionality. For example, tempered glass can now be tested for anisotropies, while the edge stress can also be measured. Furthermore, complete documentation of glass quality is required now more than ever, and this is now easier to realise – thanks in part to big data and (in the future) IoT. Whereby in this regard, the trend is towards storing and archiving each single pane of tested glass – together with the data and information from the results of the analysis. This allows complaints to be immediately checked and documented as to their justification.

"With the findings derived from big data analyses and our LineScanners, manufacturers can increase their quality and production efficiency while minimising rejections – key conditions for success in intensely competitive markets", according to Peter Pfannenstill, Sales Director at Softsolution.