

Pilkington benefits from integrated control system

Siemens and IconSys have delivered an integrated control-system technology solution that enables Pilkington UK to tackle productivity and operational efficiency challenges.

Facing pressure to ensure that productivity and reliability were enhanced on a key toughened glass production line, Pilkington UK has seen improvements in product quality, waste volume and operational efficiency, thanks to the recent upgrade of its automation control system technology.

A previously fragmented portfolio of legacy technology has now been brought together to provide a holistic control system overview that is driving performance improvements at a critical production site for the UK's largest glass manufacturer.

Efficiency levels

The combination of Siemens's automation technology along with IconSys' control system and glass sector expertise has delivered an effective control system, which provides production control so the manufacturer can meet market demands for higher quality glass, as well as improve

overall operational efficiency levels.

Upgrading the control solution for the busy glass production line was a challenge, as it had to take into account the varying control needs of each stage of the finished product line, including the furnace, wash station and measuring stations, as well as the requirement to transport the glass sheets between the various production stages. The integration of the system also had to be undertaken during a suitable slot within a demanding glass production schedule without affecting day-to-day operations.

Steve Martin, Head of the Glass Sector team at Siemens UK & Ireland, said: "The existing control system did not provide the precise control required to meet the fine tolerances Pilkington UK was aiming for. The accuracy of the process was also undermined by the legacy hardware, which was proving to be increasingly problematic.

"They had a fragmented portfolio

of technology solutions that was, on occasion, compromising efforts to optimise performance. Siemens' Totally Integrated Automation (TIA) approach was the technology framework on which the finalised solution was based.

"We worked with IconSys, who designed and built the new control system required to operate the entire glass line, and with it meet the product quality, waste reduction, reliability and efficiency targets we set for the project."

Nick Darrall, Operations Director for IconSys, explained: "Not only is the control of the glass production stages now improved, but speedy access to essential data to inform production-related decisions and ongoing monitoring of the line is now in place.

"An office PC allows operators to easily identify any of the hundreds of glass sheets emerging through the production

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▲ Pilkington's sites are benefiting from energy savings.

process and fulfill orders to multiple worldwide customers. The integrated combination of PLC, controllers, drives, I/O, SCADA, motors and cameras provides an overall control system for the glass line driving efficiency at all stages.

Accurate analysis

The project was completed without any disruption to existing work scheduling, and Pilkington has reported benefits to its daily operations.

The availability of key data to provide analysis around any reported problems or changes in quality performance has allowed the management team to more effectively interrogate potential reasons for any issues as they arise.

This information also informs and supports predictive maintenance strategies and ensures production reliability is not compromised.

Product quality demands in line with market requests are now being met and exceeded, while from a cost perspective the measurable reduction in waste from the production line has contributed to a more efficient process and saving money.

Derren Gittins, Downstream Operations Director for Pilkington UK is delighted with the outcome of the control system upgrade. He stated: "We truly value the partnership approach we have with Siemens and IconSys.

"Their combined glass sector expertise and quality-driven support has ensured that the project implementation progressed smoothly without any disruption to our production commitments, and the subsequent integration of control technologies across the plant is providing benefit in terms of access to essential real time data so we can make informed decisions."

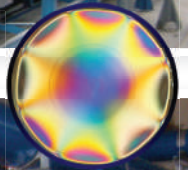
As a result of the control system integration, Pilkington UK, which operates within a competitive sector, is now better placed to meet its optimised performance and efficiency targets, as well as satisfy the demands of its customer base across the globe. ■

Siemens UK, Frimley, UK
www.siemens.co.uk/entry/en/

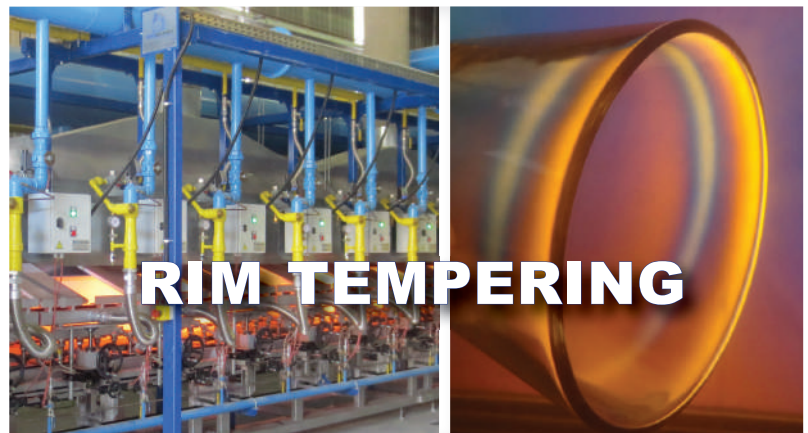


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