

Hybrid furnace project: STARA GLASS teaming up with SpecialBAU & LightTech

Thanks to a strategic partnership with SpecialBAU and LightTech, STARA GLASS has designed and delivered a state-of-the-art hybrid Oxy Fuel furnace in Hungary. Aimed at reducing emissions and energy consumption, the system includes an electric melting section powered by renewable energy – covering up to 40 percent of the total need.

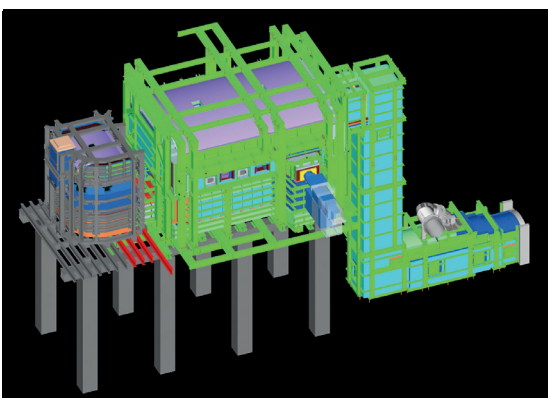
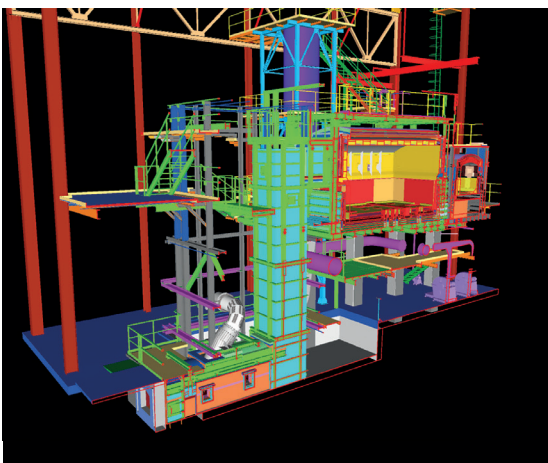
Robust synergies between Stara Glass and Hungarian company SpecialBAU, a specialist in services for the glass industry, has seen the two coordinating a highly qualified working group to tackle a particularly ambitious project, namely the transformation of an existing End Port furnace into a modern hybrid Oxy Fuel furnace. The project went ahead on behalf of LightTech, a Hungarian manufacturer based in Dunakeszi and a European leader in glass lamp production that has a wide offer spanning from general lighting to specialised lamps

for tanning, dermatology and UV sterilization.

EXISTING PLANT UPGRADED WITH GREENER, HIGH-PERFORMANCE TECHNOLOGY

With its strong international footprint, LightTech is distinguished by its continuous pursuit of improvement, both in the quality of the final product and in the sustainability of its production processes. In line with these values, the company initiated a technological evolution aimed at significantly reducing CO₂ emis-

sions, polluting gases and fossil fuel consumption. Entrusted to Stara Glass for the design phase, the project took shape thanks to the strategic synergy among all the partners involved. In particular, Stara Glass led the initial phase through an in-depth CFD analysis (Computational Fluid Dynamics), essential for modeling the characteristics of the new furnace. The company also handled the complete engineering required to define the qualitative and quantitative aspects of the refractory materials, steel structures and flue gas cooling systems.



AN EFFICIENT, LOW-EMISSION GLASS FURNACE - ALL BUILT THROUGH TEAMWORK

Equally fundamental was the contribution of a second technology partner, with whom the electric melting component was designed and dimensioned and integrated into the system through a new boosting unit. The project was thus validated both from a technical standpoint and in terms of its final performance. The result is a next-generation hybrid furnace, featuring low CO₂ emissions and equipped with an electric component powered by renewable energy sources, capable of covering up to 40 percent of LightTech's total energy demand. Another key strength of the project was the on-time delivery, despite the particularly tight schedule dictated by the strategic nature of the product and current market demands. The entire team successfully completed the project within

the expected timeframe, receiving full appreciation from the client. Innovation, engineering precision, experience and strong collaboration among the partners all joined in constituting a successful trio to power this important initiative - once again confirming Stara Glass' role as a leader in the field of sustainable glass melting furnaces. ■



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