

Core values demonstrated in STARA GLASS's formidable track record

SHOWCASING TECHNICAL EXCELLENCE

With projects just finished by the technical department of Stara Glass being many, and those to come being no less numerous, current activities by the company's R&D department are still underway in the field of research and innovation - mostly aimed, for now, at the important challenge of decarbonization that will see Stara Glass fully engaged over the years ahead.

Stara Glass proudly shares some of these completed and ongoing activities:

● Finishing ahead of

schedule in Austria

The reconstruction of two glass distribution channels at a major customer in Austria has just ended successfully - and ahead of schedule.

● Embracing hybrid furnace solutions with CENTAURO

Ve.me. (O-I Italy group) confirmed its preference for the hybrid furnace solution CENTAURO, thereby assured its order for the supply of a new plant that will be built alongside the existing one.

● Innovative initiatives in decarbonization: SU.G.A.R.

The project SU.G.A.R. (sus-

tainable Glass: Architecture of a furnace heat recovery system including a steam Reformer), sponsored by the European Community, is now entering its pilot phase, which will allow for the production of Hydrogen, obtained from the processing of furnace exhaust fumes then reused as additional fuel. This will be carried out as part of the new CENTAURO project at Ve.me. (O-I Italy group) first half of 2025.

● Global developments

After a complex project just concluded in South Korea, with customer Soo-Seok, to whom the company delivered a latest-generation Oxygen combustion furnace, Stara Glass also finished a challenging job in Brazil, with one of the world's leading groups in the flat glass sector. The EPC project, just completed, involved all the technical departments of Stara Glass at a highly technical level.

● Decarbonization and alternative energy

The process of decarbonization, which has begun worldwide, will increasingly require the use of alternative energy sources to fos-



With 2024 just passed its halfway mark, STARA GLASS now showcases its commitment to innovation and sustainability in the global glass manufacturing market. Here, highlights include the successful early completion of projects in Austria, advances in decarbonization with S.U.G.A.R. and global endeavours in hybrid furnace solutions, as well as advanced modelling software development.

sil fuels or produced through sustainable methods. Among these mentioned is electricity; seen as a 'green' energy source, it is increasingly entering -as a form of fuel- into the design of melting furnaces for glass. Indeed there is now frequent talk of the use of 'super boosting' systems or 'hybrid furnaces', intended in the sense of a high percentage use of electricity in contribution to the melting of gas or gas and oxygen, as well as the future of glass production. Even in this field, Stara Glass is strongly active, thanks to the upcoming completion of an advanced project for the realisation of a new concept of 'hybrid furnace' to be completed with the collaboration of a major European glass group.

● **Advanced Modelling Software**

For many years now, Stara Glass has been developing a series of in-house, advanced mathematical calculation and modelling software which, through the introduction of process, chemical, physical and production information, will allow for optimization of the design of a melting furnace. Among its latest activities in progress, Stara Glass has created a new software to drive qualitative improvement in the choice of refractory materials leveraged in furnace construction. Here it aims to improve insulation characteristics, which will positively impact the final



result of fuel consumption such that furnaces are not only 'green' but also 'energy saving'.

● **H2 Glass**

H2 Glass is a European project studying the behaviour of the glass melting process in furnaces that use Hydrogen as fuel - as well as related production aspects. Stara Glass is a very active partner - participating in all stages of this project. Here readers are invited to follow its progress on the company website.

● **COREu**

COREu, too, looks to the future of reducing CO2 production. A European project, it is part of the much larger project Horizon, which aims to analyse the possibility of introducing Carbon Capture methods in glass production as a means of achieving sustainable forms of decarbonization for this global industry. In this project Stara Glass is an active participant through its R&D department.

A FUTURE PATH OF INNOVATION AND SUSTAINABILITY

These few lines summarise the main activities, projects and works with which Stara Glass has been involved, or has begun to realise over this past half of 2024. As there is still a long way to go, the company invites Glass Machinery Plants & Accessories readers to watch this space as it continues to give more details to the industry in the near future. ■



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