

# Great energy scale-back characterises MAZZAROPPI **ENGINEERING** glass tempering



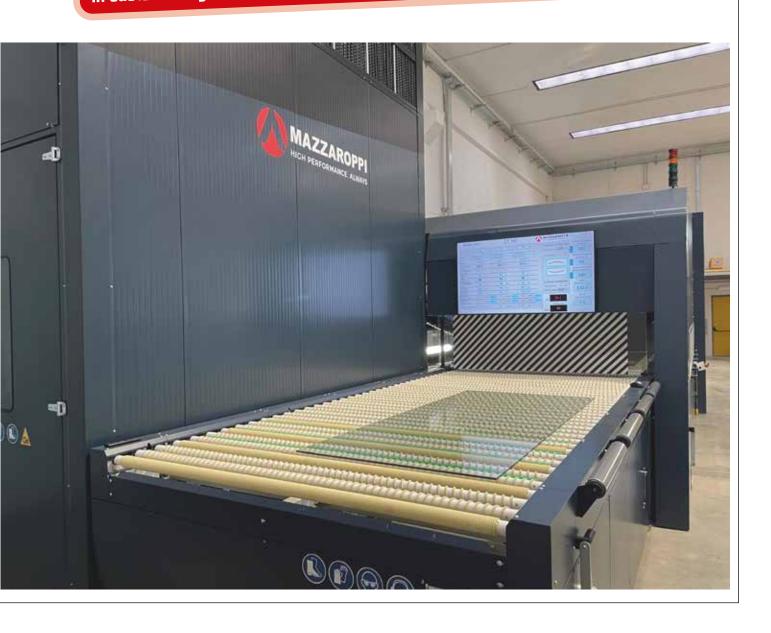
n the world of high-performance glass tempering, where sustainability meets precision, Mazzaroppi Engineering stands as a pioneering force. The Italian company, nestled in Aprilia just beyond the gates of Rome, has redefined what is technically possible in energy efficiency. Now led by the third generation of the founding family, Mazzaroppi continues to set global benchmarks in innovation - significantly reducing the energy demands of tempering processes by as much as 70 percent when compared to conventional solutions.

# **ENVIRONMENTAL FOOTPRINT REDUCTION**

At the heart of Mazzaroppi's technological renaissance lies

a single, compelling mission: to optimise glass processing performance while dramatically lowering environmental impact. This commitment has led to the development of a new generation of tempering furnaces capable of operating at previously unthinkable levels of efficiency. In practical terms, this means glass can now be tempered to the highest standards using as little as 180 kW - an achievement that eliminates the need for a dedicated electrical cabinet altogether. Such performance not only slashes operational costs but also simplifies the overall infrastructure requirements of glass manufacturing facilities. What enables this leap forward is a suite of proprietary innovations, meticulously designed and

Revolutionizing glass tempering with furnaces that reduce energy consumption by up to 70 percent, today's MAZZAROPPI ENGINEERING solutions feature patented Efficiency 5.0 software as well as Start&Stop ignition. The company's systems offer high performance, fast restart times and user-friendly operation - setting a new standard in sustainable glass manufacturing.

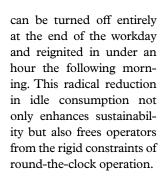




rigorously tested by Mazzaroppi's in-house engineering team. At the core of this transformation is the company's newly patented Efficiency 5.0 software. This intelligent platform introduces advanced peak containment algorithms, allowing the furnace to modulate energy usage with extraordinary precision. By controlling consumption dynamically, Efficiency 5.0 minimises spikes and ensures that every kilowatt contributes directly to the tempering process.

## M START&STOP - JIT IGNITION **TECHNOLOGY**

Complementing this is the M Start&Stop - JIT Ignition technology, a breakthrough that challenges long-held assumptions about furnace operation. Unlike traditional systems that require continuous power or lengthy shutdown-startup cycles, Mazzaroppi's furnaces







# **USER-FRIENDLY SOLUTIONS**

Equally notable is the accessibility of Mazzaroppi's systems. Despite their technical sophistication, these furnaces are designed with intuitive interfaces and streamlined workflows, ensuring that operation does not demand highly specialised personnel. This user-centric approach lowers the barrier to adoption and facilitates seamless integration into production environments of varying scale and expertise.

### **SUSTAINABILITY**

Underpinning these innovations is a portfolio of patents that safeguard Mazzaroppi's leadership in energy-efficient tempering technology. Each solution reflects a philosophy rooted in practical excellence and long-term performance where sustainability is not a trade-off, but a built-in

advantage. As the glass industry increasingly pivots toward greener production Mazzaroppi's practices, contributions are not only timely but transformative. Visitors to upcoming international trade fairs like VITRUM will have the opportunity to experience firsthand the power and simplicity of these next-generation furnaces. Mazzaroppi's presence will be more than a showcase-it will be a statement: that excellence in glass tempering is no longer just about speed and precision. It's about doing more with less.

