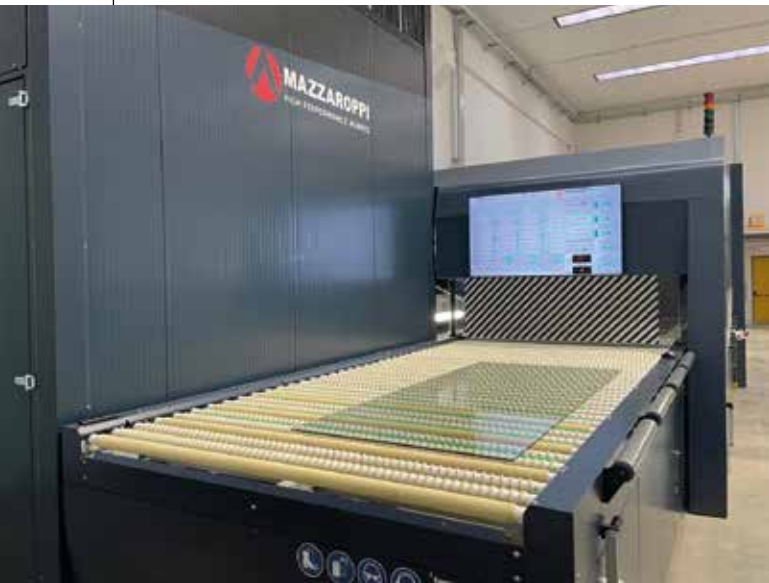


# Energy volatility gives MAZZAROPPI furnaces a sharper edge



With energy prices fluctuating sharply, Italian furnace maker MAZZAROPPI argues that long-term tempering costs depend chiefly on consumption. Its patented M Efficiency 5.0 software and M Start&Stop technology target peak current, idle costs and predictable production economics for glassworks worldwide in periods of uncertainty today.

## **G** LASS TEMPERING IN TIMES OF ENERGY CRISIS: MAZZAROPPI'S SOLUTION

In recent years, energy prices have surged unexpectedly more than once, placing renewed pressure on glassworks and companies whose production costs depend

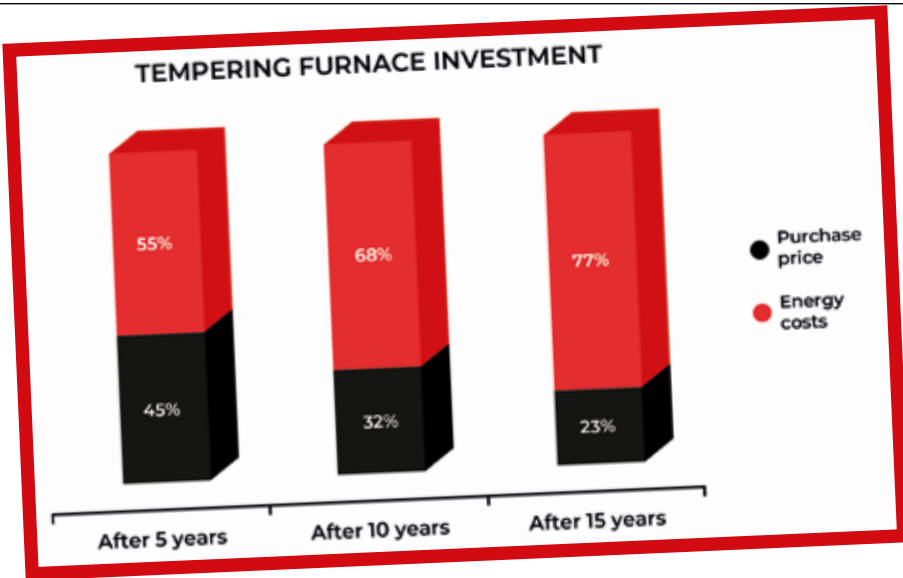
heavily on power consumption. For the Italian company Mazzaroppi, the answer lies in reducing the long-term energy burden of glass tempering.

### **THE REAL COST OF TEMPERING**

The main cost involved in tempering glass is not the initial investment in the furnace.

That outlay can be recovered relatively quickly through the increased productivity the equipment enables. The greater challenge is the energy bill. Many glassworks have faced exorbitant energy costs in recent years as a result of market fluctuations. If rising prices continue, these costs

risk constraining growth and affecting business continuity. Federico Mazzaroppi, the company's marketing manager, explains that while the cost of a furnace is written off over time, energy costs continue to accumulate. Five years after the initial investment, energy accounts for 55 percent of total expenditure;



after 15 years, that share rises to 77 percent. Those figures refer to a medium-sized furnace operating on a single shift. For furnaces running two shifts, or in the event of further energy price increases, the percentage would be even higher.

### EFFICIENCY BY DESIGN

Saving on the purchase price of a furnace can therefore become a double-edged sword. Energy remains the largest factor in an investment of this kind, regardless of the machinery chosen, making efficiency essential to controlling long-term expenditure. Mazzaroppi, active in the glass temper-

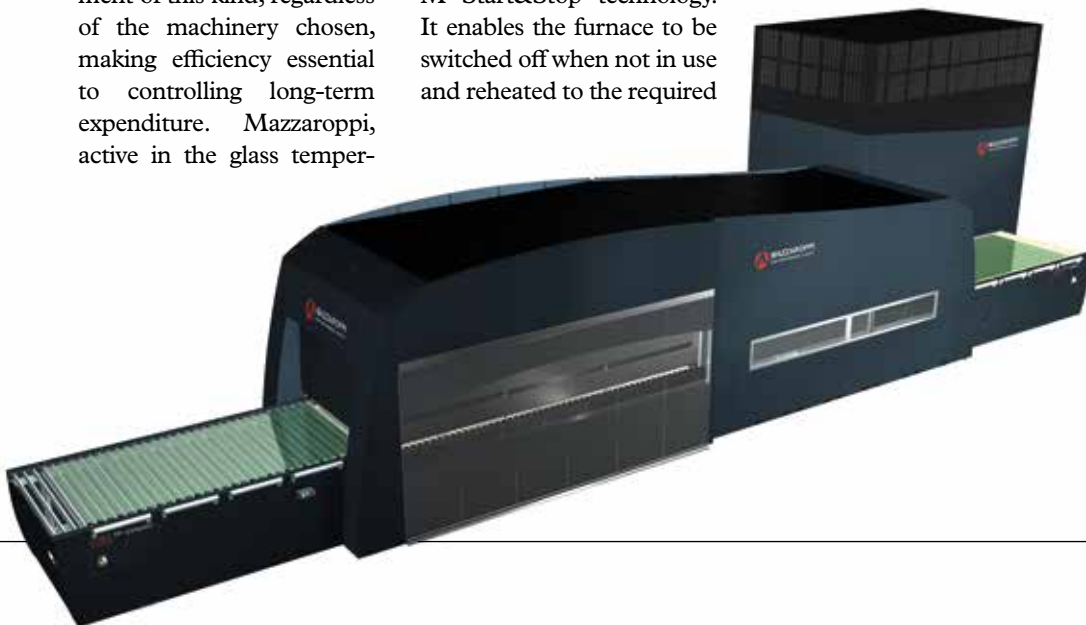
ing sector since 1958 and renowned worldwide, has focused over time on making its furnaces easier to use and increasingly energy-efficient. This approach has been supported by specific patented technical solutions, including M Efficiency 5.0 software, which limits peak current and average consumption. The system is designed to maximise energy efficiency throughout every stage of the tempering cycle, ensuring smarter and more uniform heating of glass sheets. Another example is M Start&Stop technology. It enables the furnace to be switched off when not in use and reheated to the required

temperature within half an hour for the next shift, reducing idle costs.

### PREDICTABILITY IN UNCERTAIN MARKETS

For Mazzaroppi, the only way to reduce tempering costs over the long term is to keep energy consumption down. Its furnaces are said to deliver energy savings of up to 70 percent compared with competitors' systems, generating consistent financial savings day after day and

year after year. According to Federico Mazzaroppi, a Mazzaroppi furnace is designed to safeguard the operations of glassworks and companies of all sizes by ensuring autonomy and high-level performance. In today's market, that safeguard also depends on efficient energy use. With energy prices fluctuating, limiting their economic impact at company level is essential to avoiding production stoppages or repeated price increases that could lead to the loss of customers. Mazzaroppi positions its technology as a route to lower, more predictable fixed costs, supporting business continuity for glass tempering operations during periods of energy uncertainty.



Via Cagliari, 49  
04011 Aprilia (LT) - ITALY  
Tel.: +39-06-92854602  
commerciale@mazzaroppi.com  
saleseng@mazzaroppi.com  
[www.mazzaroppi.com](http://www.mazzaroppi.com)