

Boro' Foundry Partners with Meltech to Slash Induction Furnace Energy Costs and Improve Sustainability

Smarter cooling control system cuts runtime by 5.5 hours daily, saving an estimated £5,448 a year with 2.45-year payback.

STOURBRIDGE, WEST MIDLANDS, UNITED KINGDOM, July 3, 2026 /EINPresswire.com/ -- [Boro' Foundry](#) has successfully modernised its induction furnace cooling operations through a strategic partnership with induction furnace technology specialists, Meltech. By transitioning from a fixed schedule to an intelligent, demand-led PLC control system, the West Midlands-based manufacturer has significantly reduced electricity consumption and mechanical wear on critical equipment.

Induction melting systems rely heavily on circulating water-cooling pumps and external fans to maintain equipment longevity. Historically, Boro' Foundry utilised a fixed six-hour run-on period post-production to ensure adequate cooling. However, this meant the system ran at full capacity regardless of actual demand.

Recognising an opportunity to improve energy efficiency, Boro' Foundry collaborated with Meltech to integrate a PLC control system with a Pulsar IGBT inverter. This upgrade enables real-time communication between the inverter and the cooling system, allowing operations to respond dynamically to actual temperature requirements.

Key operational upgrades Include:

- Demand-based cooling control: Equipment automatically shuts down once optimal cooling is achieved.
- Drastic runtime reduction: Unnecessary runtime of cooling pumps and fans has plummeted



Furnace Panel

from 6 hours to just 30 minutes post-production - saving 5.5 hours of energy every operating day.

- Reduced maintenance costs: Operating fewer hours directly translates to less mechanical wear on pumps, motors and fans, extending the lifespan of essential foundry assets.

Based on the total investment for the project, the system is on track to achieve full payback within approximately 2.45 years.

Sam Edwards, Sales Director at Boro' Foundry, commented:

"Improving efficiency isn't always about major capital investment; sometimes it's about making smarter use of the systems we already have. This solution has enabled us to better align energy use with actual demand, reducing unnecessary waste while supporting the long-term sustainability of our operations."

This modernisation project highlights Boro' Foundry's wider commitment to [sustainable manufacturing](#) and continuous operational improvement within heavy industry.

For more details on Boro' Foundry's engineering capabilities and sustainability initiatives, [view the full case study here](#).

Sam Edwards
Boro Foundry
[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/924125162>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.



Control Panel