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Customer Reference

Mitsubishi Electric Automotive Czech: BMS-Driven energy and facility performance

How Mitsubishi Electric Automotive Czech uses a Building Management System (BMS) to improve visibility, optimise energy consumption, and support sustainable factory operations

Key points

- **3,000+ measurement points:** a single view of critical plant infrastructure
- **Active energy management:** reduced consumption and improved cost control
- **Faster response:** automated alerts support proactive facility management

Mitsubishi Electric Automotive Czech (MEAC), part of the Mitsubishi Electric Group, operates a modern manufacturing facility, supplying automotive components to customers across Europe. As part of its digitalisation strategy, the company has implemented a data-driven approach that extends beyond production, connecting building infrastructure and energy systems to improve operational performance and sustainability.

The Challenge: As factories become increasingly data-driven, operational performance depends not only on production equipment but also on the systems that support it. HVAC installations, cooling systems, data centres, UPS infrastructure, and other technical utilities all have a direct impact on efficiency, energy consumption, and reliability.
The challenge for MEAC was to transform information from these systems into measurable benefits, including lower energy costs, reduced downtime, and improved operational visibility. At the same time, the company wanted to avoid disruptive replacement projects and instead build on proven infrastructure already in use across the facility.

The Solution: MEAC adopted a pragmatic approach focused on connecting existing infrastructure to a data-driven management layer. Stable and proven Q-series controllers remained in place, while additional connectivity was introduced where it could provide measurable operational value.
At the heart of this approach is a Building

Management System based on ICONICS Genesis64 and MELSEC iQ-R PLCs. The solution continuously monitors HVAC systems, free cooling, UPS installations, data centre infrastructure, and other technical utilities throughout the facility. More than 3,000 measurement points are integrated into a single environment, providing a comprehensive view of plant conditions and performance.

By consolidating operational data into one platform, the system enables teams to make faster decisions, identify issues earlier, and respond more effectively to changing conditions across the site.

The results: The implementation has delivered measurable improvements across facility and energy management operations. Greater visibility enables faster troubleshooting and supports more informed decision-making, while automated SMS and e-mail notifications help teams react quickly to emerging issues.
The BMS also provides practical support for energy optimisation by helping control consumption, reduce demand peaks, and improve energy purchasing decisions. As a result, MEAC can lower energy costs while supporting its wider sustainability and carbon-neutrality ambitions without compromising operational performance.
Data has become an active management tool, supporting continuous improvement across the facility and helping transform operational information into measurable business value.

Operational benefits: At MEAC, energy management is closely linked to operational performance. The BMS enables the factory to actively manage consumption levels, reduce peak demand, and support smarter energy purchasing decisions. Rather than simply measuring energy usage, the system provides the information required to optimise how energy is consumed across the site.
This approach helps reduce operating costs while supporting broader sustainability objectives. Energy performance can be monitored continuously, allowing the energy-saving team to identify opportunities for improvement and take action when needed. The result is a practical framework for balancing productivity, efficiency, and environmental responsibility.

Why it matters: One of the key strengths of the project is its pragmatic approach to digitalisation. Rather than replacing established production systems, MEAC retained its proven Q-series controllers and introduced new capabilities through a connected data layer.
This strategy reduced implementation risk while ensuring that improvements could be delivered more quickly. It demonstrates that successful digital transformation does not necessarily require large-scale replacement projects. Instead, existing infrastructure can be enhanced through connectivity, visibility, and better use of data.

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