

FACTORY AUTOMATION

Customer Reference

FDA Packaging enhances machine building capabilities with Mitsubishi Electric solutions

How targeted PLC programming training enabled a UK packaging machinery specialist to upgrade skills and improve operational efficiency

Key points

- **Skills upgrade:** Successful transition from older programming formats to advanced GX Works3 software
- **Improved efficiency:** Enhanced programming capabilities directly benefit operational performance
- **Future-ready solutions:** Simple CPU Communications feature enables scalable machine connectivity

FDA Packaging, a Norwich-based provider of flow wrapping machines serving customers worldwide since 1994, has partnered with Mitsubishi Electric as a key element of its development strategy. As a small to medium-sized machine builder, the company recognised the need to upgrade programming skills to keep pace with evolving industry demands. Through Mitsubishi Electric's comprehensive training programme, FDA successfully transitioned to advanced PLC programming techniques, directly enhancing their machine building capabilities and operational efficiency.

The Challenge: Craig Hodgkinson, a director at FDA Packaging, needed to upgrade his programming skills to meet the industry's evolving requirements. His primary goal was to master the latest MELSOFT GX Works3 software, essential for integrating the MELSEC iQ-F (FX5) series PLCs into their flow wrapping machines. The challenge involved transitioning from older programming formats to the new, more intuitive system. Additionally, Craig wanted to explore the 'Simple CPU Communications' feature for connecting multiple machines digitally, moving away from traditional hardwired connections to enable more efficient product flow management and easier future expansion.

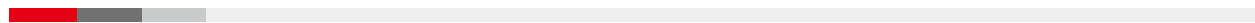
The Solution: Craig attended a two-day iQ-F PLC Intermediate Training course focusing on

the FX5 PLC series with GX Works3, facilitated by Training Manager Paul Proctor. The course was part of Mitsubishi Electric's robust curriculum designed to address learning needs across their entire product range and automation experience levels. The face-to-face classroom format provided safe skill practice essential for advanced programming tasks. During the course, Paul accommodated Craig's specific interest in Simple CPU Communications by setting up a practical demonstration with three connected PLCs, configuring settings and showing signals passing between units, despite this not being part of the standard curriculum.



The Results:

Following the training, Craig successfully updated his previous programs, enabling the FX5 PLC to run efficiently on FDA Packaging's flow wrapping machines. The intuitive design of



GX Works3 has significantly enhanced his programming capabilities, directly benefiting the business through improved operational efficiency. The knowledge gained about Simple CPU Communications offers FDA a more effective approach to machine connectivity, reducing wiring complexity and enabling easier expansion. Craig's experience and feedback have also helped Mitsubishi Electric's training faculty identify opportunities for more solution-focused learning pathways, aligning with their vision of expanding curriculum beyond product-based training to address future industry solutions.

Training Approach: The two-day intermediate course combined structured curriculum with flexible, practical problem-solving. Training Manager Paul Proctor's classroom approach emphasised hands-on learning, allowing Craig to practice advanced programming techniques in a safe environment. When Craig expressed interest in Simple CPU Communications for his specific application, Paul set up a practical demonstration using three PLCs available in the classroom, configuring settings and demonstrating signal exchange between units. This responsive approach ensured the training addressed both general skill development and specific business needs.

Business Impact: The training delivered immediate practical benefits for FDA Packaging. Craig's enhanced programming capabilities enable more efficient development and modification of machine control programs. The transition to GX Works3's intuitive interface reduces programming time and potential for errors. Understanding Simple CPU Communications opens new possibilities for FDA's machine architecture, allowing cleaner installations with less wiring whilst facilitating easier expansion when customers add machines

to their production lines. These improvements strengthen FDA's competitive position in the flow wrapping machinery market.

Partnership Value: The relationship between FDA Packaging and Mitsubishi Electric extends beyond equipment supply to encompass skills development and technical support. Mitsubishi Electric's comprehensive training curriculum, spanning their entire product range and various experience levels, provides FDA with ongoing opportunities to enhance capabilities as technology evolves. The flexibility to adapt training content to specific business challenges, as demonstrated with the Simple CPU Communications demonstration, exemplifies the partnership approach. This collaboration supports FDA's growth strategy and ensures they can leverage the full potential of Mitsubishi Electric's automation solutions.

Future Development: Craig's training experience and feedback are contributing to the evolution of Mitsubishi Electric UK's training programme. The faculty is using insights from machine builders like FDA to develop more solution-focused learning pathways that address real-world challenges rather than purely product features. This approach aligns with Mitsubishi Electric's vision of preparing customers for future industry requirements. For FDA Packaging, the foundation of skills and knowledge gained through this training positions them to confidently tackle emerging challenges and continue innovating in the machine-building sector.

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