

Securing the Future of Manufacturing: BONNER Implements Tosibox Solution for DMI's Smart Factory

Enhancing Efficiency and Security





Digital Manufacturing Ireland (DMI) is an IDA supported organisation based in Limerick, Ireland focused on advancing digital manufacturing technologies.



BONNER, founded in 1978 in Dublin, is a leading Irish company specializing in industrial automation, calibration, and instrumentation products. They offer advanced solutions in process automation, data acquisition, and operations management, helping businesses optimize their processes for Industry 4.0.

The DMI Challenge: Creating a Scalable and Cybersecure Digital Factory

Digital Manufacturing Ireland (DMI) faced the challenge of developing a cutting-edge digital manufacturing factory. As a greenfield project, the goal was to create a state-of-the-art showcase of digital manufacturing technologies, highlighting what is possible with the latest advancements.

DMI needed a robust, secure, and scalable control system to demonstrate innovative manufacturing processes and serve as a benchmark for the industry. This system also had to ensure cybersecurity-safe access for remote staff, allowing them to connect securely and efficiently.

The challenge was to design and implement a solution that would allow for the seamless integration of advanced technologies while ensuring operational efficiency and providing a scalable platform for future technological demonstrations.



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To address these challenges, BONNER implemented an advanced MES-based control system that utilised the Tosibox Hub System.

The Tosibox Hub provided a secure and scalable infrastructure essential for the project. The implementation involved deploying multiple Tosibox Locks and connecting various equipment through the Tosibox Hub, creating a unified and secure network.

"At a user level, Tosibox allows the DMI to benefit from remote support, meaning the lead time for support is reduced, and the cost of travel to the site is removed"

Operations manager, DMI

The Tosibox Hub facilitated seamless remote access and control, significantly enhancing operational efficiency and security. BONNER's expertise in installing and configuring the system ensured a smooth implementation tailored to DMI's specific needs.

This setup allowed DMI to effectively showcase advanced digital manufacturing technologies, demonstrating their potential to industry stakeholders.

Benefits

- Enhanced network security and reliability, ensuring uninterrupted demonstration of technologies.
- Scalable infrastructure to support the integration of future advanced manufacturing technologies.
- Improved control and monitoring of demonstration processes, facilitating better decision-making.
- Time and cost savings through efficient management and maintenance of the control system.
- During the control system's development and testing phases, Tosibox's secure remote connection
 was used to coordinate with various teams and machine builders, ensuring efficient integration and
 comprehensive testing.





