Case Study for IIoT - Resource Efficient Supply Manufacturing Environment (RESuME) IIoT

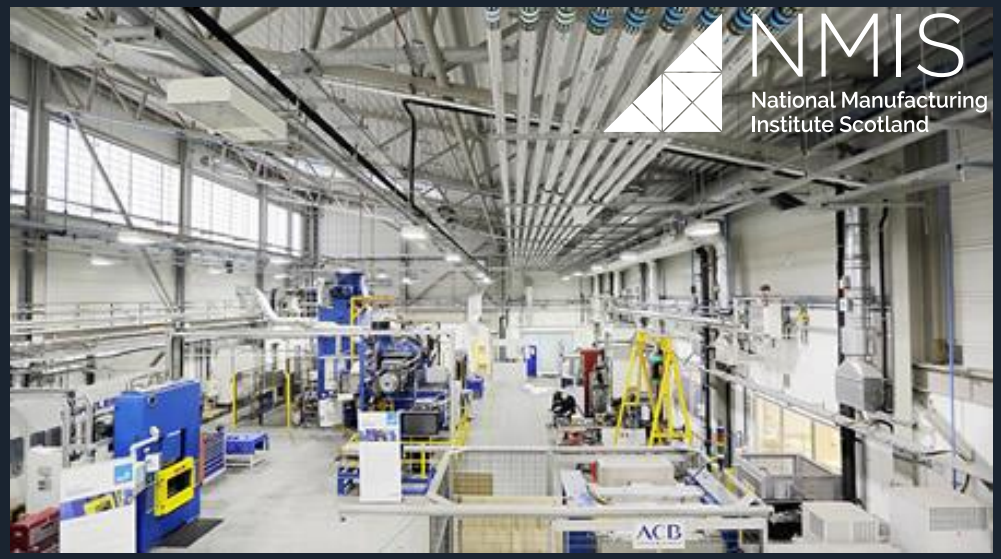
Client: National Manufacturing Institute Scotland (NMIS,)

Background: The RESuME testbed was created to underpin NMIS Digital Factory by enabling digital connectivity and ISA-95 inspired data integration for machines and equipment. The project scope covers IIoT infrastructure for machinery & equipment located in the AFRC. There are 73 machines ranging from low tech to state-of-the-art.

Solution: To supply, install & commission IIoT sensors & gateways on all machines & equipment in the OEM & customer sandbox testbed. Data will be aggregated into the XpertFactory platform via a new industrial ethernet network for further analysis & insight. The data acquired covers energy monitoring of machines, machine performance, and building monitoring, and will be accessible via local displays and remotely via the cloud.

Benefits: The provision of an IIoT system that facilitates seamless, synchronised, and centralised real-time data acquisition from existing machinery & equipment enabling data processing, dashboarding, analysis, and storage. As the machines can be linked to a complete ecosystem (e.g., via local HMI's/ Dashboards/ Cloud), detailed analysis of machine performance is achieved remotely providing critical insights to machine performance and machine learning opportunities.

xpertfactory



Cost Saving

Remote Assistance

Increased Uptime

Real-time Quality Data

Energy Saving

Reconfigurable Manufacturing

Time Saving