



CASE STUDY

MSD Ballydine: QBMS and nQBMS Design & Commissioning

Opened in 1976, the Ballydine site employs 500 people and has API and Formulation manufacturing facilities. The Sirius relationship with the site dates back to 2008 and the RC project. Subsequent projects since then have combined to make substantial state-of-the-art Qualified and Non-Qualified Building Management Systems (QBMS and nQBMS).

The Combined Solution

The Siemens Building Management System at MSD Ballydine consists of:

- 28 Outstation panels, housing 32 Siemens PX controllers, divided into 2 systems QBMS & nQBMS.
- These controllers communicate via BACnet over IP (Ethernet).
- Both systems are deployed on virtual server arrangements.
- The QBMS consists of 8 Air Handling Units, complete with temperature, humidity, pressure control & quality critical environmental alarming,
- The API manufacturing room's pressure cascade is monitored and alarmed on the QBMS.
- Each system has alarm functionality, logging & archiving, executed by the latest Siemens Desigo CC 21CFR11 compliant supervisor.
- All systems on the QBMS are fully validated and have passed AIQ, SAT, AOQ & PQ Testing.
- All of the environmental data on the QBMS is also sent to the PI historian for archiving.
- The nQBMS consists of 14 Air Handling Units for manufacturing, warehouse, facilities & support areas complete with Siemens Unitary VAV and FCU controllers for the administration areas.

The nQBMS also interfaces with a large quantity of variable speed drives over the Modbus RTU Protocol, primarily for control purposes with additional vital information logged and archived.

All systems on the nQBMS are logged and archived by the Siemens Desigo CC Software.

The Result

Each project was very successfully delivered, to high MSD expectations, by Sirius.

This was due in part to our intimate knowledge of the site and relationships nurtured through the repeat projects and sustainability deployments. The early contractor engagement method developed by MSD for partners adds significant value to each project and allows successful delivery.

We are delighted with our performance on this site over all of the projects and feel that it demonstrates the high skills and dedication of our employees and rewards our company for our commitment to the delivery of high-quality systems. We look forward to developing the relationship further in upcoming projects.