

CASE STUDY: Clean Room Monitoring & Control

CHALLENGE

Our customer's control system provided monitoring and control of cell culture processes, which are used to provide active ingredients for vaccinations.

The control system monitored and controlled a number of conditions including; temperature, humidity, atmospheric pressure, airflow and oxygen.

Bilfinger UK were awarded a contract to implement equipment to monitor and control the environment within the clean room, which is critical as even the slightest variation in temperature could significantly affect the process.

SOLUTION

- We carried out the detailed design, programming, installation and commissioning of a validated automation system for the environmental monitoring and HVAC equipment in the manufacturing bioprocess utilising a Siemens PCS7 DCS.
- We delivered the system using Good Automated Manufacturing Practice (*GAMP*).
- We provided a foundation for future expansion and replacement of obsolete automation systems.



BENEFITS | GAMP Standard Delivered | Compliance with CFR21 Part 11 Regulations | Existing Systems Integration |
| Designed for Future Expansion | Effective Monitoring & Control of Clean Room Conditions |

Technical Information Summary



TECHNOLOGY USED

- SCADA/HMI – Siemens PCS7.
- PLC – Siemens S7.
- Networks – Wireless communications.
- Others – Tablet PCs were used as SCADA clients.
- Management – GAMP, CFR21 Part 11 and full project life cycle using our ISO 9001 TickITplus accredited quality management system.