

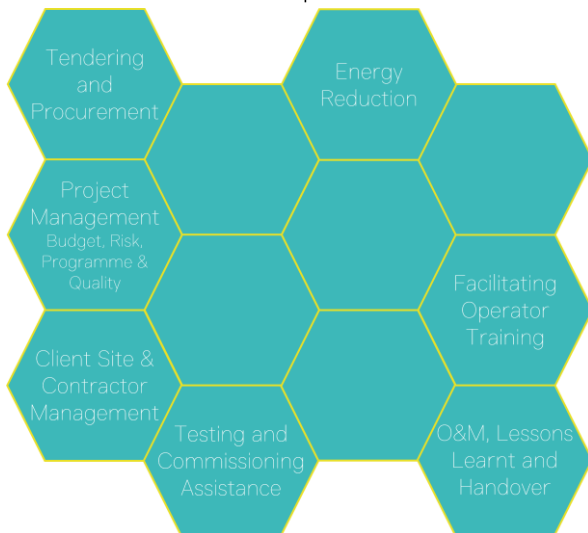
Client: The Pirbright Institute
 Sector: R&D Life Sciences
 Project: Direct Fan Drive Conversion
 Project Value: £86,876
 Date: Nov 2020 to Jan 22



Our Client's Need

The site had a requirement to convert an AHU belt driven fan to direct drive fan due to excessive breakdowns and for energy reduction. The BMS Control panel was also obsolete and needed to be upgraded. Finally, due to its age, the sub main cable and sub main switch needed replacing to comply with latest standards. They needed Grationeer Ltd to provide a Project Manager and Site Manager to manage the delivery of the project.

Services provided



Benefits Delivered

- This project significantly reduced downtime for the building through reduction of breakdowns and reduced energy consumption.
- Grationeer Ltd's experience of HVAC and BMS controls was invaluable for this project.
- All aspects of the project managed by Grationeer Ltd autonomously, allowing the client to focus on their day-to-day activities.
- Grationeer Ltd produced monthly PM reports and attended monthly Project Board meetings on behalf of the client.

Works Completed

Grationeer Ltd were involved with this project from the Business Case stage prior to any design works taking place. The first task was to define the User Requirement Specifications to enable the invitation to tender to be developed. Grationeer Ltd worked with the site's procurement team to tender/procure the works and negotiate the contract for the works. The works involved replacement of the belt driven fans, provisions for new electrical supplies to the building and upgrade of the existing IQ2 Trend controllers to IQ4.

Once contracts for each work scope was in place, Grationeer Ltd coordinated between the 3 separate suppliers to agree a programme of works. There were interdependencies between the work scopes which needed to be considered and planned accurately to reduce risk of delays.

Due to Grationeer Ltd's background of HVAC and Energy Reduction, we took a leading role in defining and firming up the design and established the energy reduction savings that were achieved once the project was delivered in the project close out report.

The AHU works affected the building users as a shutdown was needed to allow the works to take place. Grationeer Ltd maintained close communications with the building users to ensure that they were kept informed of progress and any issues that had been encountered. This help them plan their works around the project.

The BMS panel needed to be upgraded to the latest controller (IQ4) and the control description was to be transferred to the new controllers. As new fan drives were being installed, new control sequences were required to allow them to operate with some added resilience functions, such as Duty/Standby changeover. Grationeer Ltd managed this change process with the site to ensure that all changes were approved prior to making the change. Due to the criticality of the building and the science works taking place, Grationeer Ltd planned sufficient time in the programme to ensure full testing of the control system for handover.

The sub main cable and switchgear needed to be replaced due to age. However, this work required an entire electrical shutdown of the building. Grationeer Ltd liaised with the building users to plan this during a weekend. This required careful planning as there was a risk of affecting science work if this was not communicated properly. The project was commissioned successfully and handed over without impacting any science work.