


CASE STUDY

COMMERCIAL REFRIGERATION MANUFACTURER



Commercial Refrigeration Manufacturer

As Europe's leading commercial refrigeration manufacturer, this client is at the forefront of new technology, pioneering new standards in temperature control, hygiene, efficiency and appearance.



They were the first company to produce professional storage refrigeration in the UK in 1968 and have led the way ever since.

Industry



Food and
Beverage

Product



Test and control system
implementation using
enVigil Flex



The Challenge

Our client utilised a test and monitoring system to evaluate the energy efficiency of the refrigeration units they manufacture. However, this existing system had become outdated, unreliable and was no longer supported by the original manufacturer.

They engaged Acquisition Systems (ASL) to conduct a review of their test system and modernise it, utilising existing hardware where possible to reduce costs. ASL also looked to introduce efficiencies, automation and visualisation of data to the new test system.

ASL's Approach

ASL initially deployed an experienced engineer to conduct a full review of the existing system, assess the integrated hardware and fully establish our client's requirements. Following this visit, a draft Functional Design Specification for the proposed modernised system was issued for approval before proceeding further with the project. This initial visit identified that much of the system hardware could be utilised in the improved system, with repairs and integration included into ASL's scope of works.

Following approval of the Functional Design Specification the new system was deployed to site.

The implementation phase involved installing a new server as the primary processor for data, utilising the latest monitoring software, enVigil Flex, acquisition. All current test systems were merged by unifying the communication protocols allowing the display of all data for the test cells and the auxiliary equipment utilised in a single environment.



Repairs and rewiring of current test 'skids' and 'saddles' were performed where necessary, and these were recommissioned. The system was configured such that any of the four mobile test skids and six saddles can be connected to different test points in the client's facility. The enVigil software detects and correctly logs the location of the test points without the need for operator configuration.

Additional micro-PC's were installed within the development department, which connected to the Server through a remote desktop. These act as the view nodes for operators running tests to view live data and generate reports. Additional remote connection licenses were installed to allow external connections for engineers working from home, or for ASL engineers to remotely support the system.

ASL engineers worked with the client team to produce a series of familiar but updated screens for viewing live data from any test cell. Operators are able to command various operations from the screens including but not limited to,

Reporting, Start/Stop Test, and Data Entry for serial numbers. Keeping the screen designs similar to the current system reduced the need for extensive retraining of our client's staff.

Finally, ASL utilised the batch reporting module of the enVigil Flex software to streamline the production of test reports, including all relevant test data and information, with minimal need for engineer input. Again, these reports were configured to match our client's existing template.



The Outcomes

“The expertise and overall solution delivered by ASL was seamless. The enVigil Flex Software has modernised our systems and improved efficiency while maintaining familiarity for our team.”

Senior Design Engineer

ASL were not only able to resolve our client’s immediate issues but also established a foundation for continued support and collaboration. By adopting a strategic approach and incorporating new features into their existing infrastructure, ASL ensured a cost effective and seamless transition for our client.

The enVigil Flex monitoring system provides:

- > Unifying of all test cells systems into a single system
- > Remote monitoring of test systems, including engineers working from home
- > Automation of test report generation
- > Continuity of screen and report design to ease transition

The successful implementation enabled our client to resume commissioning activities without disruption, ensuring business continuity and operational efficiency.

