Remote monitoring of industrial gas generation plant

Remote asset management system improves plant performance and reduces cost

Our Client

Multi-national Industrial Gas and Chemicals company who supply to a range of manufacturing sectors.

The Problem

'We have high value plant located throughout Europe but we can't easily access key performance indicators'. This was the problem presented to us by a multi-national gas and chemicals company.

Whilst operational data was available, often there was insufficient historical information; it was difficult to access and at times incomplete.

The Solution

In conjunction with our client we developed a robust and reliable method of capturing data with a range of analytical, graphical, KPI dashboard and reporting interfaces to provide the necessary capabilities. Alerting functionality was also developed that enables notification by exception to drive continued efforts to improve performance.

The Benefits

- Significantly improved visibility of the performance of the assets
- Reduced unplanned downtime
- Prevent many instances of unexpected equipment failure (approx. £80k saved per instance averaging 3 per year)
- More than £900k saved through contractual compliance and productivity improvements

Operation/production managers can focus on value added tasks rather than monthly reporting.

The Detail

An industrial gas and chemicals company approached us with a problem. They were finding it very difficult to access information from their fleet of high value gas generators which would help them identify actual performance.

The plant in question are owned, operated and maintained by our customer on behalf of their clients but for most of the time they operate unmanned. While data could be accessed (with difficulty) and interrogated on spread sheets it was limited (1-2 weeks of data). Monthly performance reports were time consuming and prone to human error and operations were reactive which made process improvements difficult.

Working closely with our customer we identified the key requirements and developed a tool that now collects data from over 60 assets across Europe reading more than 15,000 tag values every minute.

Information is available on Dashboards via the intranet which displays Key Performance Indicators (KPI) to illustrate how effectively the assets are running and whether they are deviating from optimum levels.

Equipment failure can be predicted using statistical techniques which allow more proactive responses to issues (planned preventative maintenance). Automatic production reports mean operation/production managers can spend more time optimising the asset.

We continue to work with our customer to maintain the benefits that have been achieved and to enhance the existing system so further improvements can be realised.