



CUSTOMER CASE STUDY

AVEVA streamlines the processes for a focused supplier of consultancy, engineering and project management services to high-stakes customers.

AMEC - www.amec.com

Industry - Engineer, Procure, Construct

Goals

- To gather engineering data out of disconnected spreadsheets and put it into a database.

Challenges

- AMEC needed to be able to detect a wide range of data inconsistencies during design quickly, and communicate them more effectively.

AVEVA Solution

- Engineering
- Electrical

Results

- It is now easy to create and manage engineering data.
- Drawings, datasheets, cable schedules and bills of materials are now generated automatically.
- Changes can be implanted quickly, and controlled and communicated more effectively.

AMEC is a focused supplier of consultancy, engineering and project management services to its customers in the world's oil & gas, minerals and metals, clean energy, environment and infrastructure markets. With annual revenues of some £3.3 billion, AMEC designs, delivers and maintains strategic and complex assets for its customers and employs over 29,000 people in around 40 countries worldwide.

A new approach

AMEC have constant challenge to execute a value-added project for its clients, achieving higher quality, reduced schedule and lower costs, resulting in improved competitiveness, and views technology as a key facilitator to improving their overall engineering delivery.

The AMEC approach is often described as 'data-driven engineering'. This means that the focus is primarily on the data and the corresponding workflows. Data flows through the process in a managed way. The flow needs to be electronic, and, where possible, automated, but the control aspect is critical.

Engineers can't have data changing 'under their feet' in an uncontrolled manner. Everyone needs to understand the status of the information they are working with, and the location of the master source of any particular data set. Managing the data integrity correctly means that document production becomes a by-product of the database.

A new project that was about to start up in the Aberdeen office had a real need, both for new functional capabilities and for a higher level of integration. The client wanted to see more efficient and effective work practices in brownfield engineering across the board, with a much greater use of data and database-controlled environments. Their objective was to remove the dependency on spreadsheet delivered engineering.

Continuing benefits

AVEVA products have, for many years, been a key enabler for AMEC's strategy of Integrated Engineering & Design. The company decided to adopt AVEVA Engineering and AVEVA Electrical products to create an enhanced Integrated Engineering & Design methodology. The latest IE&D infrastructure is being deployed from the Aberdeen office on brownfield oil & gas engineering projects, but this is far from an isolated activity.

Other parts of the organisation are closely monitoring the success of the new products and workflows and will be able to rapidly learn from, and emulate, the success of Aberdeen.

This approach has become a virtual standard for the introduction of technology at AMEC, who have a long history of successfully pioneering new software solutions. For example, when AVEVA Instrumentation was new, much of the pioneering work with the product was carried out by the office in Oakville, Canada. The newly developed skill base in Oakville was able to pass on their knowledge and experience and support the wider deployment of the software in other offices and sectors. The approach reduces risk, accelerates learning and fosters the uptake of new technologies to the benefit of the entire global organisation.