

CUSTOMER CASE STUDY

Global engineering and procurement leader Atkins maintains a competitive edge with AVEVA™ E3D Design

Atkins - www.atkinsglobal.com/energy
Industry - Engineer, Procure, Construct

Goals

- To reduce time needed for deliverables
- To boost engineering collaboration to enable lean methods in the brownfield project execution

Challenges

- Compliance with industry, company, and project standards
- High cost of doing business in Australia

AVEVA Solution

- AVEVA E3D Design
- AVEVA™ Point Cloud Manager

Results

- 40% reduction in the delivery time of structural drawings
- Global deployments are now set up in days, not months
- Atkins is overall more competitive in the world market

AVEVA helps Atkins maintain a competitive edge

Australia – Atkins is one of the world's leading design, engineering, and project management consultancies, employing some 50,000 people across the UK, North America, Middle East, Asia Pacific, and Europe. Its breadth and depth of expertise, and its drive to continually ask 'why,' has enabled the company to plan, design, and deliver some of the world's most complex and time-critical projects.

Competing in the world market

Western Australia is an expensive place to do business, so its industries need to be particularly efficient at adding value if they are to compete in world markets. In addition to the challenge of creating fast and accurate deliverables, the majority of Atkins' projects are brownfield ones with difficult access conditions and often inaccurate or incomplete-as-built information available. Traditional surveying techniques can be slow and costly. 3D laser scanning offers a much quicker, cheaper, and more efficient alternative; large areas can be accurately scanned in a very short time. Atkins needed a 3D design tool that had tight point cloud integration.

“AVEVA E3D Design also reduces the extent of site survey. We only have to survey the tie-in points and any identifiable pinch points. Some pinch points you can't identify until later, but even if we do miss one, AVEVA E3D enables us to take quick and effective corrective action after the fact. We not only gain speed and reduce risk, we also increase design quality, which leads to further cost and time savings on site.”

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Jim Wright
Design Team Lead, Atkins

Time-saving technology from AVEVA

Atkins decided to put AVEVA at the center of its engineering. The use of AutoCAD was abandoned and drawings were generated directly from PDMS instead. Atkins had no hesitation in migrating to AVEVA E3D Design and updating its PDMS-based procedures to take advantage of the new capabilities.

Remote collaboration for faster project delivery

Atkins used AVEVA E3D Design on the Varanus Island Compression Project (VICP) for Apache Energy. It was a complex greenfield project but with a lot of brownfield tie-ins and a demanding 14-week design schedule. This highly collaborative, 8,500-engineering-hour project involved all engineering disciplines, as well as the client, at each step of the design process. The modular design enabled Atkins to run multiple teams in tandem to fast-track the work. As a result, the teams delivered the completed design in just 13 weeks. Atkins is in the process of launching its new global design strategy, in which AVEVA technology will play a prominent role.

With AVEVA E3D Design and laser scan data from AVEVA Point Cloud Manager, engineers anywhere in Atkins can undertake extensive and accurate brownfield projects without ever having to set foot in the actual facility

“When we ran a trial of AVEVA E3D Design, we found that getting drawings out in this way would reduce the delivery time of structural drawings by 40%. That's a lot. 40% saves a lot of money, especially if you're looking at massive projects such as the Apache Energy project.”

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Jim Wright
Design Team Lead, Atkins