

CUSTOMER CASE STUDY

Tekfen Engineering uses AVEVA™ E3D Design to mitigate issues caused by working across countries, time zones, and language barriers

Tekfen Engineering - www.tekfenengineering.com
Industry - Engineering contractor

Goals

- To implement a smooth and swift software transition and data migration
- To eliminate costly rework
- To support easy collaboration
- To minimize misinterpretations among engineers working in different time zones and languages

Challenges

- Visualizing 3D designs was not feasible
- Time-consuming face-to-face meetings were needed to verify design and data iterations
- Complicated document control procedures required much verification
- Work performed simultaneously in multiple time zones and languages

Results

- Quick installation and deployment
- Improved project delivery time
- Reduced effort, errors, and rework as the software facilitates multi-discipline collaboration
- Improved productivity and project capacity

Solutions

- AVEVA E3D Design

Tekfen reduces project execution times and cost with AVEVA E3D Design

Istanbul, Turkey – Tekfen Engineering is familiar with geographic and cultural complications, given its current client base across Turkey, the Middle East, Africa, and Azerbaijan, with projects planned in Ghana, Morocco, Kuwait, Qatar, Bulgaria, and South East Asia.

A smooth transition to next-generation design

When an engineering project involves multiple teams, from numerous organizations, working across varying time zones, often in different languages, there are too many points where, if things can go wrong, they will. To minimize the risk of misinterpretation of data, drawings, changes, and specifications, firms often need to invest time and money in traveling between locations for regular update meetings. They also have to employ rigorous document control. Even when they do so, errors can still occur.

Accustomed to using AVEVA™ PDMS for its 3D plant designs, Tekfen was looking to improve the speed, quality, and profitability of its projects, taking intelligent design to the next level. The geographic spread of its projects and multiple requirements for inter-company collaboration meant re-evaluating the technologies used in the company's design process.

Tekfen wanted to move closer to a dynamic design environment that would bring together 3D models and laser data. Integrating data from engineering tools with wider Enterprise Resource Planning systems was also an area the company wanted to address. This had often been a complicated process when several external vendors and subcontractors were also involved in a project.

It was also important that any move to a new software solution should be implemented with minimum disruption to ongoing business.

Simplifying fabrication and installation

In late 2014, the company chose AVEVA E3D Design, a solution that enables clash-free, multi-discipline 3D Design. Tekfen's complete migration of its PDMS projects to AVEVA E3D Design took less than ten weeks, even though a transition in technologies can cause disruption within an organization if not carefully handled.

“Our main concern was in the migration of our existing PDMS projects over to AVEVA E3D Design. This was an exercise that required clarity in communication and that's exactly what AVEVA provided.”

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Tolga Timirci

Piping and Plant Design Department Manager, Tekfen Engineering

AVEVA was able to alleviate Tekfen's concerns in this regard since AVEVA E3D Design is built on existing, trusted AVEVA technology. This makes incremental deployment possible by project, department, and team; an organization can see immediate evidence of efficiencies as the user base rolls out. AVEVA E3D Design can easily be deployed on the same projects as PDMS and the transition is smooth, easy to upgrade, and, above all, risk-free. A key improvement is the new graphical interaction with the canvas. The graphical interface is much more natural to learn and quick to adopt.

Automatic generation of engineering drawings and integration of laser scans are key benefits that Tekfen now expects to use widely, especially on brownfield projects. AVEVA E3D Design saves Tekfen engineering even more time when they are collaborating with another engineering company on the same 3D model. Tolga states that Tekfen can now deliver more projects with the same level of resources, increasing revenue and profitability.

“We have long recognized that AVEVA's software is the industry standard for engineering and design. Increasingly, our projects span continents and time zones, so the collaboration capabilities of AVEVA E3D Design will also help us to ensure that all stakeholders have the right information at the right time.”

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Alparslan Gure

President of Tekfen Engineering

