CASE STUDY: PROCESS GROUP, UNITED ARAB EMIRATES





FACTS AT A GLANCE

Company: Process Group – A company of Degremont, SUEZ ENVIRONNEMENT Group

Website: www.processgroup.com.au

Description: Process Group has more than 30 years' experience in providing technical solutions, such as packaged process systems and process trains, across a range of industries. The company is recognized worldwide for its innovative engineering and ability to generate strategic value and bottom-line benefits for its clients.

Industry: Oil & Gas Employees: 130 Country: Australia

PRODUCTS USED

• CADWorx® 2014 Plant Professional

KEY BENEFITS

- Increased efficiency due to new and enhanced features
- Improved design integrity
- Easy to learn and use

PROCESS GROUP HELPS DELIVER MAJOR MIDDLE EAST GAS PROJECT

Intelligent 3D plant design and modelling solution with enhanced piping and structural features used on Shah Deniz 2 project

IDENTIFYING GOALS

Process Group works with some of the world's leading owner-operators to deliver projects across the oil and gas production, refining, petrochemical, and carbon capture industries. It maintains fully integrated sales, design, engineering, and fabrication facilities in Australia and the United Arab Emirates (UAE), allowing the same team to control entire projects – from concept design through to final manufacture and commissioning – from one site.

Process Group is currently engaged on BP's Shah Deniz 2 project in the Caspian Sea region – one of the largest gas developments in the world. When complete, the project will be responsible for delivering six billion cubic metres per year (bcma) of gas to Turkey, and a further 10 bcma to markets in Europe. The current concept for Shah Deniz Stage 2 includes 500km of subsea pipelines, which will link 26 gas production wells with the onshore terminal. The design for the project was executed in Australia and the fabrication in the UAE.

OVERCOMING CHALLENGES

- Allocate unique part details to all piping components to integrate with finance and procurement systems
- Boost accuracy through precise 3D modelling and detailing
- Save time through isometric batch generation complete with title block data
- Utilize catalog specifications to drive efficiency when producing tender models

REALIZING RESULTS

Process Group had used Intergraph® CADWorx® & Analysis Solutions for many years and recently moved to Autodesk® AutoCAD® Plant 3D for a limited time before deciding CADWorx 2014 Plant Professional was a more suitable solution for its future 3D plant design, modelling, piping, and structural requirements.

The solution offers new pipe routing capabilities, which drastically cut down the time it takes to model piping systems. Quicker modifications and more powerful component catalogues and piping specifications drive efficiency, and intelligent assemblies help save time and money while boosting accuracy through standards.

"CADWorx 2014 Plant Professional offers a highly capable piping and structural

solution at a cost-effective price," said Process Group's Senior Piping Designer, Paul Tautor. "The efficiency gains driven by the new features have been outstanding."

One of the main goals of the project was to enable the allocation of Process Group-determined unique part numbering for individual piping components. Intergraph's Global Network Partner in Australia, Cortex Engineering, provided the knowledge and understanding of CADWorx catalog specifications and showed Process Group how to seamlessly integrate with its project delivery and business systems.

Process Group was particularly impressed by the included catalog specifications. "The advantage of having these basic specifications out-of-the-box is that there is no need for us to create specifications when producing tender models, which saves a lot of time," said Tautor. The project team was also extremely satisfied with the robust structural steel component with extensive section-type libraries and steel coping.

Tautor also noted the inclusion of I-Configure as a major advantage. This graphic user interface allows easier setup of ISOGEN® Style Sheets, while providing many additional options above and beyond the Project Manager Interface.

MOVING FORWARD

Given the efficiency gains noted on Shah Deniz 2, Process Group intends to use CADWorx 2014 Plant Professional as the plant design and piping software on all projects going forward.



Meg regeneration package, Shah Deniz 2 project



Meg regeneration package, Shah Deniz 2 project

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