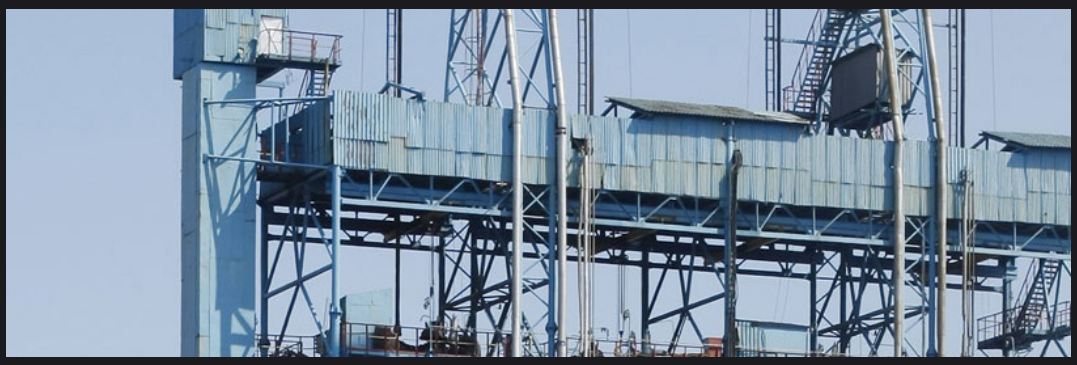
CASE STUDY

De Smet relies on Octave solutions in alternative fuel quest



Key facts:

Company: De Smet S.A. Engineers & Contractors

Website: www.dsengineers.com

Industry: Power

Country: Belgium

Octave products used: Forte 3D *(Intergraph Smart 3D),* Facets P&ID *(Intergraph Smart P&ID)*

Key benefits:

- Minimal implementation time
- Optimized work processes with integrated solutions
- Enhanced data transparency

De Smet Engineers & Contractors (DSEC) has an established reputation as an agro industrial integrator, specializing in agro-industrial fields such as sugar, edible oil, biofuels and biochemicals. It is a world-class provider of engineering, procurement andconstruction services under a single point responsibility.

With the growing demand for alternative fuels, De Smet S.A. Engineers & Contractors must complete user-ready projects in a limited amount of time and with a pre-defined budget. The Belgium-based engineering company selected Octave's family of products to meet this challenge.

Identifying goals

DSEC works on global turnkey projects involving the alternative fuel industry. With 150 employees, the company holds a project portfolio of about US$600 million.

The engineering company serves two primary markets; the sugar and bioethanol industry and the edible oil and biodiesel industry. For the sugar and bioethanol industry, DSEC performs its own process detail engineering.

DSEC requires flexibility and precise planning to overcome its key challenges:

- The growing demand for alternative fuels
- Time and budget limitations for turnkey projects

Overcoming challenges

DSEC selected Octave's solutions to meet its challenges.

In an effort to reduce construction time and costs, DSEC has its piping work pre-assembled, sometimes completed at great distance from the actual plant site, which creates another set of challenges.

"We felt that with Octave, we could benefit from efficient and responsive technical support for software implementation," said Bernard Nokerman, project manager for DSEC. "We were also very interested in the integration of Forte 3D with Facets P&ID."

DSEC selected several products from Octave for their project needs, including:

- Forte 3D
- Facets P&ID
- Basic Integrator
- Forte Review (formerly Intergraph Smart Review)

"The Octave team showed superior knowledge and their quick response time always surpassed our expectations."

Bernard Nokerman
Project Manager, De Smet S.A. Engineers & Contractors

The company's primary objective was to improve productivity using software that was easy to use and that could easily import data from subcontractors. DSEC also wanted reliable software that would be supported in the future. The ability to share the software outside DSEC's main office was also important.

DSEC implemented Facets P&ID to use for schematics. That was followed by the implementation of Forte 3D to improve productivity and offer the ability to integrate with third-party products.

Facets P&ID is knowledge-driven engineering software for creating intelligent piping and instrumentation diagrams (P&IDs). Forte 3D is a complementary, full-suite solution that provides all the capabilities needed to design a plant and keep it as-built throughout its lifecycle.

Realizing results

Using Octave Solutions, DSEC manages several projects in production including about 650 pieces of equipment and 3,500 pipelines distributed among 15 main process buildings. All implemented licenses are used on a daily basis and distributed concurrently.

Nokerman said the main reasons for choosing Octave solutions were:

- The ability to seamlessly integrate data between Facets P&ID and Forte 3D
- Importing and exporting documents in common formats (SAT, DWG, XLS)
- Quality of technical support
- Ease of training

But he is confident that the company will meet its objectives in terms of productivity improvements.

"In the future, we expect faster startup on projects based on currently developed backgrounds, including equipment models, specifications and working procedures," said Nokerman.

Octave France was closely involved in the start-up process, including training and piping specification creation. No data migration was required since DSEC started on a clean slate. Internal knowledge was used for data development, with only a few subcontractors' models directly imported.

The time it took to begin initial production with Octave software was very brief. DSEC wanted to get started with projects quickly, so the software was used out-of-the-box without any customization.

"Employee training was completed in a matter of days instead of weeks," said Nokerman.

Moving forward

DSEC plans to evaluate Facets Instrumentation (formerly Smart Instrumentation) for future usage. Depending on its workload, the company may also expand the number of users.

"We expect to use Octave's worksharing capabilities where needed," said Nokerman. "The next step for us will be to improve and set up the collaboration process between our civil works and structural departments and related external engineering subcontractors with a relay to the workshops."

With DSEC expecting to meet its objectives using Octave solutions, Nokerman commented that companies in similar situations should consider working with Octave to solve their own production problems. Independent of software implementation and user training, it is very valuable to invest in a well thoughtout setup of working procedures in collaboration with Octave experts.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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