

CUSTOMER CASE STUDY

Promon uses AVEVA engineering and simulation tools to support its new position as a solutions provider for the entire plant lifecycle.

Promon
Industry - Engineer, Procure, Construct

Goals

- Expand solutions offerings from basic engineering to plant operations and maintenance using integrated process and utilities databases.
- Reduce project engineering hours by implementing digital twin technology for its customers.

Challenges

- Simulating plant processes and utilities in separate softwares complicated the engineering cycle, resulting in loss of time and SME resources.
- A lack of integrated engineering and simulation databases inhibited collaboration and increased engineering hours.

AVEVA Solution

- SimCentral
- PRO/II
- Everything3D (PMDS)
- Instrumentation
- Electrical
- Engineering

Results

- 15% reduction in engineering hours spent on design and simulation.
- 60% faster project implementation using AVEVA SimCentral.
- Faster engineering, less re-work, easier installation, and responsive local IT support

Seamless Accommodation of Different Interfaces Circumvents Downtime

São Paulo, Brazil – Promon's project portfolio features such high-profile projects as the Itaipu hydroelectric plant (on the Brazil/Paraguay border), the Angra Nuclear Power Plant (Rio de Janeiro), and numerous oil & gas projects across Brazil.

The company handles multiple small to mid-sized energy projects in partnerships with local Owner Operators and construction firms; this means there is a constant need to respond in different ways to varying customer requirements. This makes Promon responsible for ensuring that when it is called upon to interface with external systems, it can do so quickly and efficiently at every stage of every workflow. Failure to do so would not only slow up project progress, it would also erode Promon's profitability and outstanding reputation as one of the best engineering companies in Brazil.

A New Position in Brazil's EPC Landscape

As part of its digital transformation strategy, in 2017, Promon adopted a new market position as a solutions provider for the entire plant lifecycle. To support its expansion, Promon turned to AVEVA's EPC and simulation solutions to integrate data between simulation platforms and engineering databases (P&IDs, 3D environment, etc.). Behind the power of the digital twin, Promon continues to shape the landscape of plant design, engineering, operations, and maintenance providers across Brazil and the world.

"This AVEVA solution goes straight with our strategy, which is the strategy of serving the customer... from the beginning of the business concept, to best engineering solution, and operation solution."

-
Oswaldo Bernardo,
Operations Director, Promon

The Challenge of Separate Process and Utilities Databases

The challenges of simulating plant processes in one software (PRO/II) and simulating utilities in another software presented a roadblock to Promon's engineering and process efficiency. Prior to AVEVA's integrated solution, analyzing process and utilities data from separate databases slowed Promon's ability to simulate process upsets. For real progress to occur, its leaders had to find an integrated engineering and simulation solution.

"To synchronize all the data that moves across different areas - five, six areas - is hard work. So, working with the tools like the ones that AVEVA offers helps us to reduce a lot the number of people working on the project, helps us to keep data more integrated, allowing us to do the work with better quality and higher productivity."

-
Alex Sandoval,
Systems Coordinator, Promon

Becoming a Solutions Provider for the Entire Plant Lifecycle

When Promon decided to invest in new technology as part of its strategy to deliver a unified platform to all fronts: basic engineering, detailed engineering, plant operations, and maintenance, the EPC firm tabbed AVEVA as its digital transformation partner.

AVEVA was selected more than a decade ago for the value PRO/II brought to its client portfolio. In 2017, Promon again selected AVEVA for the specific libraries and usability of SimCentral, and AVEVA's local technical support in a region where support resources are scarce or non-existent.

How SimCentral Reduces Engineering Hours by 15%

With a user friendly interface and seamless integration with MS Excel, SimCentral enables Promon to simulate plant processes and process utilities in a single platform improving the engineer's experience, promoting greater collaboration among teams, and reducing engineering hours considerably.

“The figures that we have today give a reduction order of 15% in spent engineering hours using AVEVA tools, either in the simulation part or in the detail part of the design.”

-

Maurício Arakaki,
Engineering Manager, Promon

Short Learning Curves and Rapid Implementation

In its first case using SimCentral, Promon estimates it would've taken 3 days to complete using a traditional simulator. Instead Promon was able to learn how to use SimCentral, install an Excel add-in, configure the

platform for a gas flow assurance simulation, and run 112 cases in the span of a single day. That's roughly a 60% reduction in project implementation made possible by AVEVA.

“What's interesting in that case is that we didn't know the tool. We had training in the morning, and in the afternoon, we were already using it in a real project, a real project for a client, and this shows that the learning curve for SimCentral was impressive for us.”

-

Tatiane Souza,
Process Engineer, Promon

Looking to the Future

As digital transformation continues to change the way plants are designed and operated, Promon continues supporting their customers' evolution in the digital world. With the power of SimCentral and the digital twin, designing, constructing, operating and maintaining plant processes is more efficient than ever, and with the partnership of AVEVA, Promon has successfully matured its offerings to better serve Brazil and the world.

