



CASE STUDY

PT Saipem Indonesia develops intelligent P&ID capabilities with Octave Facets P&ID

Key facts:

Company: PT Saipem Indonesia

Website:
www.saipem.com

Industry: Oil & Gas

Country: Indonesia

Octave products used:
Facets P&ID (*Intergraph Smart P&ID*)

Key benefits:

- Global, concurrent engineering with a "single source of truth" for all P&ID data
- Increased productivity and data quality
- Improved accuracy in engineering deliverables across all disciplines
- Reduced project hours and costs

Identifying goals

Headquartered in Italy, Saipem is a world leader in the oil and gas contracting services sector, both onshore and offshore. It is a global contractor, with a strong local presence in strategic and emerging areas, such as West Africa, North Africa, the former Soviet Union (FSU), Central Asia, the Middle East, and Southeast Asia.

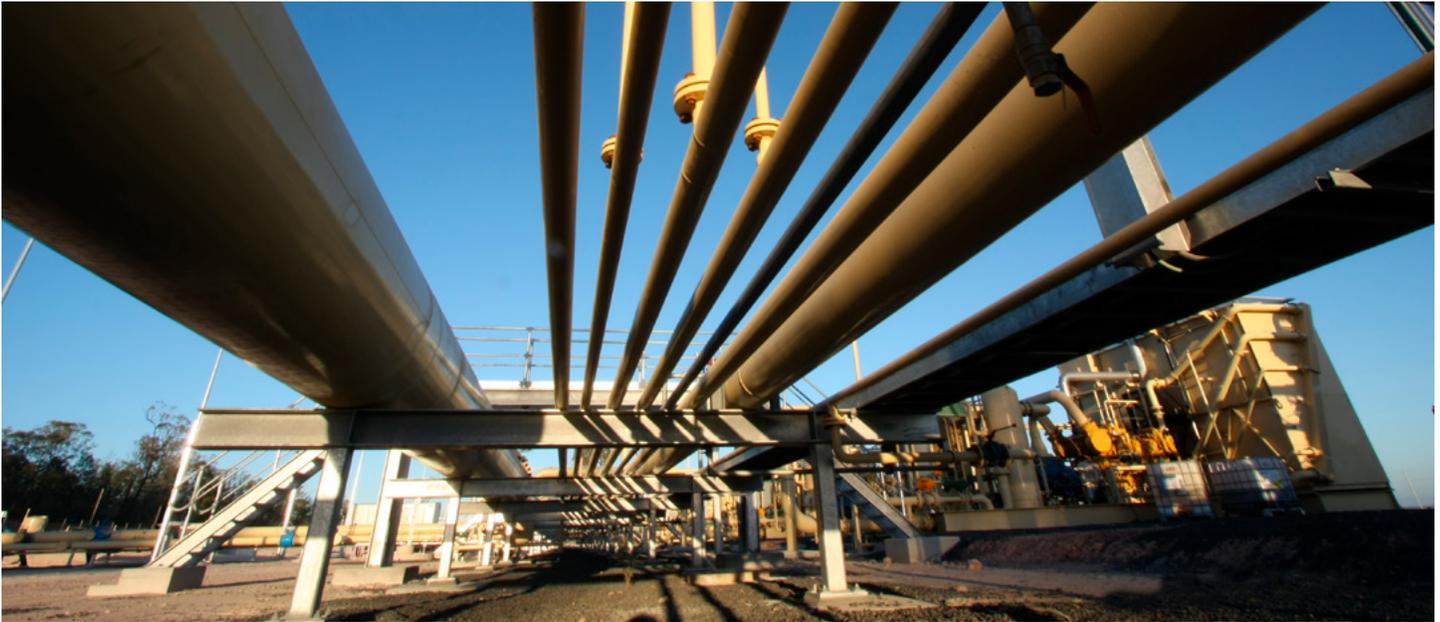
Piping and instrumentation diagrams (P&IDs) now contain much more data, which needs to be integrated with other disciplines. PT Saipem Indonesia decided that it should be aligned with other Saipem global engineering centers and develop smart P&ID capabilities with a single reference point to enhance efficiency. This can help to reduce the workload for engineers as less time will be required to check and synchronize P&IDs, especially when there could be over 200 drawings generated for a typical project. A single, standardized P&ID reference point also ensures consistency in data and symbology across all of Saipem's engineering centers worldwide.

Overcoming challenges

- Establish a single reference point for accurate and consistent P&IDs that can be accessed by all engineering centers
- Create intelligent P&IDs that reflect the as-built status at all times
- Improve quality of P&ID data and overall productivity

Realizing results

PT Saipem Indonesia chose to implement Facets P&ID because it is a proven technology and is already in use at other Saipem engineering centers. Facets P&ID is the number one asset-centric, rule-driven P&ID solution in the global market and has created more than 200,000 P&IDs for plants worldwide. It helps users at PT Saipem Indonesia to develop and manage their P&IDs with a focus on the plant asset rather than the documentation representation, and can be leveraged into the downstream tasks, such as Octave Forte 3D (formerly Intergraph Smart 3D) and Octave Facets Instrumentation (formerly Intergraph Smart Instrumentation). This accurately reflects the as-built plant for enhanced safety, quality, efficiency and productivity.



Facets P&ID Generation Teams were established at Saipem's global engineering centers, including PT Saipem Indonesia. With the standardization of Facets P&ID, all centers are using the same reference and the same work instructions. This helps to enhance global collaboration as all the engineering centers can easily access the consistent, high-quality data, enabling them to work on projects remotely and provide a continuous work cycle.

Facets P&ID can also be integrated with other solutions, such as Facets Instrumentation for instrumentation data, and Forte 3D for piping. Engineers at PT Saipem Indonesia can easily transfer the required engineering information from discipline to discipline to facilitate the workflow process.

PT Saipem Indonesia implemented Facets P&ID for an onshore liquefied natural gas (LNG) train front-end engineering design (FEED) project as a pilot. With a user-friendly interface, it was easy to train drafters to do drafting in Facets P&ID, even for those who are less experienced with computer-aided design (CAD) systems. PT Saipem Indonesia found that the number of person-hours required to generate drawings was significantly reduced, while design accuracy and quality were greatly enhanced.

Moving forward

PT Saipem Indonesia has been very impressed with the application of Facets P&ID for its pilot project, and the company plans to train all of its engineers in the solution and extend the use of Facets P&ID for other projects in Indonesia. The company will also further enhance collaboration with other Saipem centers and establish additional engineering standards, such as common symbols, equipment, piping, and instrumentation arrangements.

In addition, PT Saipem Indonesia intends to expand its use of technology by adopting other Octave solutions for a true integrated engineering environment across the entire plant lifecycle.

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.

© 2026 Octave