



PT SAIPEM INDONESIA, INDONESIA

Key Facts

Company: PT Saipem Indonesia

Website: www.saipem.com

Employees: More than 40,000

Industry: Oil & Gas

Country: Indonesia

Products Used:

- Intergraph Smart® P&ID

Key Benefits:

- Global, concurrent engineering with “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

PT SAIPEM INDONESIA DEVELOPS INTELLIGENT P&ID CAPABILITIES WITH INTERGRAPH SMART® P&ID

Rule-driven Hexagon technology delivers increased accuracy and productivity for enhanced collaboration across global engineering centers

Saipem is a large international company, and one of the best balanced contractors in the oil and gas industry. The company has a strong bias toward oil and gas related activities in remote areas and deepwater, and is a leader in the provision of engineering, procurement, project management and construction services, with distinctive capabilities in the design and execution of large-scale offshore and onshore projects, and technological competencies such as gas monetization and heavy oil exploitation. Saipem is a truly international company – it employs over 40,000 people, comprising more than 110 nationalities, and has sizeable service bases in India, Croatia, Romania and Indonesia.

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 strong local presence in strategic and emerging areas, such as West Africa, North Africa, former Soviet Union (FSU), Central Asia, Middle East, and Southeast Asia.

Piping and instrumentation diagrams (P&IDs) now contain a lot 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 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 Intergraph Smart P&ID because it is proven technology and is already in use at other Saipem engineering centers. Smart P&ID is the No. 1 asset-centric, rule-driven P&ID solution in the global market and has created more than 200,000 P&IDs for plants from around the world. 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 Intergraph Smart 3D and Intergraph Smart Instrumentation. This accurately reflects the as-built plant for enhanced safety, quality, efficiency and productivity.

Smart P&ID Generation Teams were established at Saipem's global engineering centers, including PT Saipem Indonesia. With the standardization of Smart P&ID, all centers are using the same reference and the same work instruction. 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.

Smart P&ID can also be integrated with other solutions, such as Smart Instrumentation for instrumentation data, and Smart 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 Smart 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 draftsmen to do drafting in Smart P&ID, even for those who are less experienced with computer-aided design (CAD) systems. PT Saipem Indonesia found that the number of man-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 Smart P&ID for its pilot project, and the company plans to train all of its engineers in the solution and extend the use of Smart 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 Hexagon solutions for a true integrated engineering environment across the entire plant lifecycle.



ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us @HexagonAB.