



## FACTS AT A GLANCE

**Company:** Vietsovpetro

**Website:** [www.vietsov.com.vn](http://www.vietsov.com.vn)

**Description:** VSP is a Vietnamese-Russian joint venture that was established in 1981. It is focused on the production of oil and gas from offshore sources, exploration and survey work for the oil and gas industry, well drilling, as well as the design, assembly, and repair of offshore facilities. VSP has become the main force of Vietnam's petroleum industry and economy. About 80 percent of Vietnam's produced oil and gas comes from VSP, ranking Vietnam third in oil production and export in Southeast Asia. The company contributes about 25 percent of Vietnam's national revenue, making it the largest contributor to the state's economy.

**Employees:** 6,500

**Industry:** Oil & Gas

**Country:** Vietnam

## PRODUCTS USED

- SmartMarine® 3D
- SmartPlant® Foundation
- SmartPlant Instrumentation
- SmartPlant Electrical
- SmartPlant P&ID
- CADWorx®
- CAESAR II®
- PV Elite®

## KEY BENEFITS

- Visualization in 3D environment for easier design modifications and changes
- Accurate engineering deliverables for improved data integrity
- Increased productivity and data quality

## VIETSOVPETRO ADOPTS SMARTMARINE® 3D FOR OFFSHORE DESIGN AND REVIEW

Scientific and engineering division at Vietnamese oil and gas company leverages next-generation Intergraph® technology to enhance design of offshore platforms

### IDENTIFYING GOALS

Vietsovpetro (VSP) is a leading pioneer in the Vietnamese oil and gas industry, and is among the world's largest oil and gas companies. VSP's output has exceeded 200 million tons, and continues to grow. The Science Research and Design Institute (NIPI) is VSP's scientific and engineering division, and it is responsible for the design of offshore facilities for oil and gas appraisal, exploration, and production.

VSP has been a longtime Intergraph® customer – the company chose to partner with Intergraph because of its global leadership position in the industry with a complete portfolio of engineering solutions to satisfy VSP's project execution needs. With a dedicated focus on design and engineering, it was important for NIPI to have access to next-generation technology. It first adopted PDS®; however, as the institute took on more complex offshore projects, it became apparent that NIPI needed to update its engineering design application.

### OVERCOMING CHALLENGES

- Increase efficiency of design and review process for offshore platforms
- Generate accurate, high-quality engineering deliverables
- Improve quality of engineering data and overall productivity

### REALIZING RESULTS

VSP and NIPI learned about Intergraph's Smart 3D (SmartPlant® 3D and SmartMarine® 3D) technology, featuring rule-based engineering and automation capabilities. The company decided it should adopt Smart 3D solutions to support its offshore projects, which is aligned with VSP's vision to leverage advanced technology to improve its engineering processes.

"Without a doubt, Smart 3D is the future of engineering, and we plan to apply SmartMarine 3D for any new projects from now on," said Mr. Le Viet Dzung, deputy director in charge of engineering at NIPI. "We recognize the importance of investing in next-generation technology to address our project needs and drive continued success, and Intergraph's SmartPlant and SmartMarine Enterprise suites of solutions will deliver great value to our business. Recently, NIPI has completed 3D design for our satellite platforms – BK16, BK17, and RP3\_DGCP – by using SmartMarine 3D."

SmartMarine 3D is the world's most advanced offshore and shipbuilding design solution, providing VSP with the capabilities it needs to gain and maintain an edge in a highly competitive industry. It features breakthrough engineering technology that is automated, knowledge- and rule-driven, streamlining marine asset design processes and improving delivery schedules, with increased detail and manufacturing design productivity of up to 30 percent. SmartMarine 3D is endorsed and used by leading offshore and marine companies globally, including the most productive shipyard, the top offshore owner operator, the top fabrication yard, and the top classification society in the world.

With SmartMarine 3D, NIPI could review and easily make any design changes for VSP's offshore platforms in a 3D environment. It was also easy for NIPI to manage and monitor the development of its design projects, with the ability to generate engineering deliverables quickly and accurately, including MTOs. As SmartMarine 3D is a powerful solution, NIPI could apply it to large and complex projects with ease.

VSP has also adopted other Intergraph engineering solutions, such as SmartPlant Foundation, SmartPlant Instrumentation, SmartPlant Electrical, and SmartPlant P&ID, as well as Intergraph CADWorx® & Analysis Solutions, including CADWorx, CAESAR II®, and PV Elite®. VSP was confident to expand its use of Intergraph technology because of the high level of support it receives from Intergraph and its local partner in Vietnam, True Technology Company Limited (previously known as Credent Technology).

Mr. Le said, "We definitely see productivity benefits in using SmartPlant and SmartMarine Enterprise solutions. By giving our employees access to the latest technology, we can enhance their professional knowledge and improve execution of our projects."

## MOVING FORWARD

VSP plans to continue expanding its use of SmartPlant and SmartMarine Enterprise solutions in an integrated engineering environment. This will ensure that VSP has a complete solution across the entire project life cycle to support the development of its offshore facilities. It will also build up its engineering database with the relevant catalog and specification items to support all of its assets.



## ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data to make processes and infrastructure better, safer, and smarter. The company's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, operation, and data management of plants, ships, and

offshore facilities. Intergraph SG&I provides geospatially powered solutions, including ERDAS technologies, to the public safety and security, defense and intelligence, government, transportation, photogrammetry, and utilities and communications industries. Intergraph Government Solutions (IGS) is a wholly owned subsidiary of Intergraph Corporation for the SG&I U.S. federal business.

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