VIETSOVPETRO, VIETNAM

Key Facts
Company: Vietsovpetro
Website: www.vietsov.com.vn
Industry: Oil & Gas
Country: Vietnam

Products Used:
- Intergraph Smart® Yard
- Intergraph Smart 3D
- Intergraph Smart Instrumentation
- Intergraph Smart Electrical
- Intergraph Smart P&ID
- SmartPlant® Foundation
- 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 phase, which eases up further phases

VIETSOVPETROadoptsINTERGRAPHSMART®YARDFOR OFFSHORE DESIGN AND REVIEW

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

Vietsovpetro (VSP) is a Vietnamese-Russian joint venture 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% 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% of Vietnam’s national revenue, making it the largest contributor to the state’s economy.

IDENTIFYING GOALS

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 Hexagon PPM customer – the company chose to partner with Hexagon PPM 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 Smart® 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 Smart 3D for any new projects from now on,” said 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 Hexagon PPM’s 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 Smart 3D.”

Smart 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%. Smart 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 Smart 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 Smart 3D is a powerful solution, NIPI could apply it to large and complex projects with ease.

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

Le said, “We definitely see productivity benefits in using Hexagon PPM 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 Hexagon PPM solutions in an integrated engineering environment. This will ensure that VSP has a complete solution across the entire project lifecycle 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.