DASSAULT SYSTEMES

3DEXPERIENCE®

ENERGY, PROCESS & UTILITIES

ACHIEVING EXCELLENCE THROUGHOUT THE OIL AND GAS VALUE CHAIN

ACCESS THE LATEST TECHNOLOGIES AND METHODS FOR SAFE, EFFICIENT AND PRODUCTIVE OPERATIONS

The Oil & Gas industry is witnessing the emergence of new energy sources, from shale and oil sands to deeper offshore and Arctic reserves. These sources are changing world energy markets—with large importers becoming net exporters, increased acquisitions and consolidation, and greater competition—while environmental awareness and scrutiny increase across the value chain. Oil & Gas solutions based on Dassault Systèmes **3D**EXPERIENCE® platform bring the latest technologies and methods that more than ever before will determine success.

IF WE WANT TO MAKE OIL AND GAS SAFER, CHEAPER, AND CLEANER...

With strong ties to the Oil & Gas industry for over 30 years, Dassault Systèmes is uniquely positioned to provide solutions for the complete oil and gas value chain:

- Exploration
- Field development
- Production
- Transportation and storage
- Refining and distribution

In collaboration with key industry players, Dassault Systèmes provides next-generation Oil & Gas **3D**EXPERIENCE platform solutions that answer significant challenges for the industry.

BE AN INDUSTRY LEADER WITH OIL & GAS 3DEXPERIENCE SOLUTIONS

Exploration, Field Development, and Production

How can you encourage safety and efficiency in exploration, field development, and production? The **3D**EXPERIENCE solution for Optimized Subsurface Development provides integrated project management of subsurface activities throughout the lifecycle of an energy field and includes solutions for making informed, logic-based exploration decisions; for geomechanics and multiphysics reservoir simulations; for intelligent well planning and development; and for production management and improvement.

Facilities Engineering and Design

While engineering for performance, the safety of a facility (such as a refinery or an offshore platform) has to be maximized, and compliance with regulations has to be ensured. The Safe Plant Engineering experience provides solutions for managing requirements, functional architecture, system design, control systems, plant design authoring, and multiphysics simulations of plant systems, with the goal of "no-defect engineering."

Construction Project Control

The Optimized Plant Construction experience provides extensive control of construction projects (such as oil and gas fields, refineries, natural gas terminals, offshore terminals, and pipelines) to largely eliminate delays and cost overruns. This experience facilitates consistency and traceability of all construction project information, dynamic construction simulations using 3D models of the facility, and real-time dynamic dashboards for construction status monitoring with high accuracy.

Accelerated Equipment Development

The Single Source for Speed solution empowers oil and gas equipment companies to manage the entire product development process–from sourcing to design, engineering (including multiphysics simulations), production, and services–across all geographic locations. This experience will help companies significantly reduce costs and time-to-market while increasing product quality.

Safe and Efficient Operation

Solutions for Safe Plant Operation and Maintenance focus on proactive planning for safe and efficient operations of a refinery, natural gas terminal, or other facility. Solutions cover shutdown planning, simulation-based reliability and safety assessments, 3D virtual maintenance simulations and work instructions, virtual training, and spare parts intelligence.

Key Benefits

- Reduce exploration and production risks and costs
- Accelerate development of safer production methods
- Improve safety and reliability of equipment and plants
- Avoid project delays and cost overruns
- Reduce production downtime

Our **3D**EXPERIENCE platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

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DASSAULT SYSTEMES | The **3D**EXPERIENCE® Company

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