



## FACTS AT A GLANCE

**Company:** Daqing Oilfield Construction Design and Research Institute

**Website:** [www.cnpc.com.cn/dq](http://www.cnpc.com.cn/dq)

**Description:** DOD is an international engineering company and a technology enterprise, and is a leading design institute in China's petroleum industry. It specializes in engineering consultation, engineering design and survey, turnkey projects, engineering development and research, development of technical products, and other services. DOD has maintained a prominent position among China's top 100 survey and design corporations since 1992.

**Employees:** Over 1,700

**Industry:** Oil & Gas

**Country:** China

## PRODUCTS USED

- SmartPlant® Materials
- SmartPlant Reference Data
- SmartPlant Instrumentation
- SmartPlant 3D
- PDS®

## KEY BENEFITS

- Intelligent materials management system for increased procurement efficiency via optimized project workflows
- Integration with other engineering applications for consistent, accurate, and high-quality data
- Reduced costs and accelerated project schedules

## DOD USES SMARTPLANT® MATERIALS TO IMPROVE PROCUREMENT EFFICIENCY

Industry-leading Intergraph® technology enables Chinese design institute to establish effective materials management system

### IDENTIFYING GOALS

Daqing Oilfield Construction Design and Research Institute (DOD) is the design institute of Daqing Oilfield Limited Company, which is a subsidiary of China National Petroleum Corporation (CNPC). The Daqing oilfield is the largest in China, and also one of the rare giant sandstone oilfields in the world. CNPC is China's largest oil and gas producer and supplier, as well as one of the world's major oilfield service providers and a globally reputable contractor in engineering construction.

DOD is a leading design institute in China's petroleum industry, providing engineering, procurement, and construction (EPC) services. It took on two projects in China: a natural gas treatment plant and a natural gas processing plant. The Chinese design institute wanted to improve its current materials management process and reduce the associated risks with procurement.

### OVERCOMING CHALLENGES

- Establish integrated materials management system across all EPC processes
- Improve procurement efficiency and reduce project risks and costs

### REALIZING RESULTS

DOD determined that Intergraph® SmartPlant® Materials was the most intelligent materials management solution available in the market, offering full materials control and optimized project workflows. SmartPlant Materials is part of Intergraph's integrated suite of SmartPlant Enterprise engineering solutions, enabling DOD to manage the materials required across all engineering disciplines, such as piping, structure, equipment, electrical, instrumentation, and others. This greatly improves overall procurement efficiency and project productivity.

SmartPlant Materials is the only solution available on the market that fully supports the unique materials management processes needed in the process, power, and marine industries. It offers DOD a total material management and subcontract management solution for its projects. SmartPlant Materials is proven technology and has been adopted by industry-leading engineering firms around the world – users of SmartPlant Materials report improved procurement efficiency with lower risks and costs through accurate and effective materials management.

DOD implemented SmartPlant Materials as its centralized materials management system, establishing the relevant material codes for its projects in the SmartPlant Reference Data database. This database can then be applied in other SmartPlant Enterprise tools, such as SmartPlant 3D, SmartPlant Instrumentation, PDS®, and other solutions. Intergraph provided DOD with dedicated support and technical guidance throughout the implementation process.

With clearly defined commodity and material codes, along with the associated rules, DOD has access to consistent, accurate, and high-quality data, helping to improve procurement efficiency for reduced risks and lower project costs. Using SmartPlant Materials, the Chinese design institute is able to establish an effective materials management system, ensuring the company delivers its projects on time and within budget.

## MOVING FORWARD

DOD will continue to use SmartPlant Materials and further enhance its materials management system. The company will also integrate SmartPlant Materials with other SmartPlant Enterprise solutions for a single interface across the project life cycle. This will help to facilitate the overall construction phase of its projects and enable DOD to execute projects successfully.



## 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.

Intergraph is part of Hexagon (Nordic exchange: HEXA B; [www.hexagon.com](http://www.hexagon.com)), a leading global provider of design, measurement, and visualization technologies that enable customers to design, measure, and position objects, and process and present data.

For more information, visit [www.intergraph.com](http://www.intergraph.com).

