DAQING OILFIELD CONSTRUCTION INSTITUTE, CHINA

**Key Facts**
- **Company:** Daqing Oilfield Construction Design and Research Institute
- **Employees:** Over 1,700
- **Industry:** Oil & Gas
- **Country:** China

**Products Used:**
- Intergraph Smart® Materials
- Intergraph Smart Reference Data
- Intergraph Smart Instrumentation
- Intergraph Smart 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 INTERGRAPH SMART® MATERIALS TO IMPROVE PROCUREMENT EFFICIENCY**

Industry-leading Hexagon PPM technology enables Chinese design institute to establish effective materials management system

Daqing Oilfield Construction Design and Research Institute (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.

**IDENTIFYING GOALS**

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 is 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 Smart® Materials was the most intelligent materials management solution available in the market, offering full materials control and optimized project workflows. Smart Materials is part of Hexagon PPM’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.

Smart 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. Smart Materials is proven technology and has been adopted by industry-leading engineering firms around the world – users of Smart Materials report improved procurement efficiency with lower risks and costs through accurate and effective materials management.

DOD implemented Smart Materials as its centralized materials management system, establishing the relevant material codes for its projects in the Smart Reference Data database. This database can then be applied in other SmartPlant Enterprise tools, such as Smart 3D, Smart Instrumentation, PDS®, and other solutions. Hexagon PPM 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 Smart 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 Smart Materials and further enhance its materials management system. The company will also integrate Smart 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 HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

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 19,000 employees in 50 countries and net sales of approximately 3.5bn EUR. Learn more at hexagon.com and follow us @HexagonAB.