



HYUNDAI ENGINEERING & CONSTRUCTION, KOREA

Facts at a Glance

Company: Hyundai Engineering & Construction

Website: www.hdec.co.kr

Description: Hyundai Engineering & Construction is a leading Korean engineering, procurement, and construction company, which has carried out projects not only in Korea but around the world. It is a leader in the areas of oil and gas, petrochemicals, offshore plants, and liquefied natural gas and gas-to-liquids projects.

Industry: Oil & Gas; Petrochemicals

Country: Korea

Products Used:
Intergraph Smart® Construction

Key Benefits:

- Real-time visibility of construction status
- Data-driven site management systems eliminate inconsistency
- Improved operational readiness for handover to owner

IDENTIFYING GOALS

Hyundai Engineering & Construction (HDEC) is one of Korea's leading engineering, procurement, and construction firms, with experience in project execution across a range of industries. This includes process plants (such as oil refineries, petrochemical, gas processing plants, and gas-to-liquids projects) and industrial plants (including iron and steel mills, and smelter facilities).

The company has been responsible for a number of key construction sites in Korea and the Middle East over the past decade, including Shell's Qatar Pearl gas-to-liquid project and Saudi Aramco's Karan gas facilities project in Saudi Arabia.

HDEC's vision is to pioneer advancement in the global plant market through a combination of creativity and innovative technology.

OVERCOMING CHALLENGES

The construction phase of today's increasingly complex projects involve thousands of workers, millions of details, and numerous complex variables, such as labor, materials, weather, and schedules. In recent times, HDEC has been investigating new technologies and solutions that help to manage the billions of bits of data required to complete a project on time and budget.

HDEC was already using several other Hexagon PPM solutions to improve performance in areas such as design, but wanted to investigate ways to enhance productivity during construction. As such, in November 2014 the company commenced a pilot implementation of Intergraph Smart® Construction, Hexagon PPM's integrated solution for construction planners. It offers dynamic work package planning, construction sequencing, and reporting to streamline and integrate engineering for improved efficiency on capital projects.



REALIZING RESULTS

The pilot project was completed in January 2015, with the final report issued within HDEC during February. The feedback was exceptional, according to a manager from the IT planning team.

“Increasingly, our customers want to see their construction status in real-time and manage sites through data-driven systems, with no inconsistencies. We are confident that Smart Construction will help us to achieve this,” said the manager.

“We expect the end result to be improved project execution and improved operational readiness for handover to the owner.”

MOVING FORWARD

For the rest of 2015, HDEC intends to provide its engineers with training in both Smart Construction and SmartPlant® Foundation, Hexagon PPM’s solution for plant information management, with a view to a full implementation in the near future.



HDEC engineers learn about Smart Construction

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.