CASE STUDY

Hyundai Engineering & Construction achieves improved project execution and optimal operational readiness for handover to the owner with Octave OnSite Construction Planning

Key facts:

Company: Hyundai Engineering & Construction

Website: www.hdec.co.kr

Industry: Oil & Gas; Petrochemical

Country: Korea

Octave products used: OnSite Construction Planning *(Intergraph Smart Construction)*

The challenge

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.

Key benefits:

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

HDEC was already using several other Octave solutions to improve performance in areas such as design but wanted to investigate ways to enhance productivity during construction. As such, the company commenced a pilot implementation of OnSite Construction Planning, Octave'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

After the pilot project was completed, 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 OnSite Construction Planning 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."

HDEC provided its engineers with training in both OnSite Construction Planning and SmartPlant® Foundation, Octave's solution for plant information management.

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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