



CASE STUDY

From Thailand to Texas: Tracking 30,000 materials with Octave Loop Material Readiness



Key facts:

Company: TechnipFMC

Website:
www.technipfmc.com

Industry: Oil and gas

Country: United States

Octave products used:
Octave Loop Material
Readiness (*Jovix*),
Intergraph Smart®
Materials

The BLADE Project

ExxonMobil built a \$750 million expansion to its refinery facilities in Beaumont, Texas, and TechnipFMC is the project's EPC firm. The BLADE Project (Beaumont Light Atmospheric Distillation Expansion) used a mod yard in Thailand, and TechnipFMC deployed the Loop Material Readiness (formerly Jovix) solution to assist with supply chain visibility.

Digital warehousing/track and trace

TechnipFMC identified the opportunity to reduce risk and improve performance by replacing manual, paper-based processes with an RFID material identification system. By automating material workflow processes, Loop Material Readiness provides actionable, real-time information about the location and status of all materials needed for construction, which ensures visibility and traceability of materials in transport and on-site. Roughly 30,000 pieces of material were tracked, including 3,500 pipe spools and 3,500 steel members.

Upstream tagging

For this project, two different types of auto-ID were chosen to implement upstream: passive RFID tags and barcode labels. Fabricators and suppliers were responsible for attaching a passive RFID tag or barcode label to each fabricated material or assembly.

Key benefits:

- Supply chain visibility for 30,000 materials
- Automation of receiving, inventory, picking and issuing processes

Using Loop Material Readiness, TechnipFMC tracked

30,000 materials

from Thailand to Texas

The unique auto-ID label would then be associated to the asset in Loop Material Readiness prior to its shipment to the project.

- Three steel fabricators and two piping fabricators provided automated statusing through the fabrication process and beyond
- Twenty suppliers used smartphones and the Loop Material Readiness app, including critical mechanical and fired heater suppliers

In what ways did the project benefit from upstream tagging?

- Visibility into material status and arrival date
- Accurate material location data, on-site and off-site
- Seamless receiving at the container level
- Validation and verification upstream
- Common language among planning, logistics and purchasing teams

Octave Loop Materials Integration

Loop Material Readiness and Intergraph Smart® Materials worked together to provide The BLADE Project with real-time material information. Smart Materials fed procurement and engineering information to Loop Material Readiness, including construction work packages and purchase orders. Smart Materials returned real-time information regarding material availability, location and forecasts. This allowed procurement to close out purchase orders and deal with overages, shortages and damages (OS&Ds) more quickly.

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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