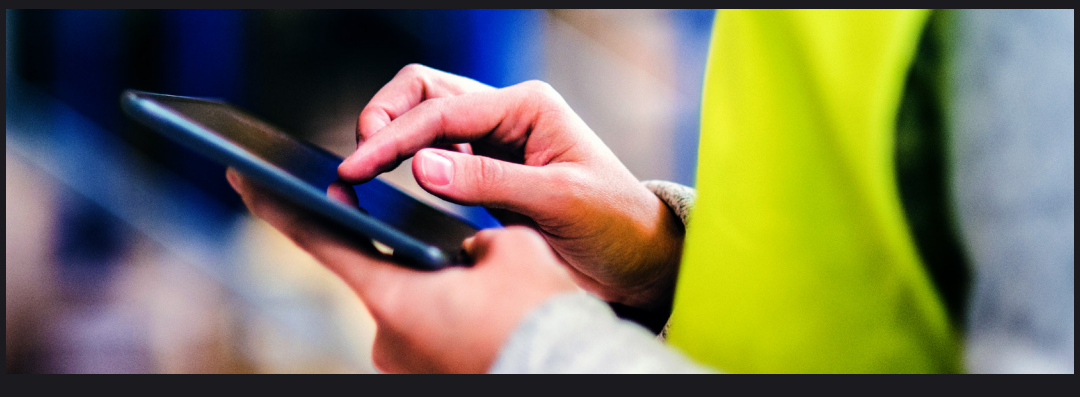
CASE STUDY

Linear Alpha Olefin unit tracks thousands of materials with Octave Loop Material Readiness



Key facts:

Industry: Chemical

Country: USA

Octave products used: Loop Material Readiness, Track and Trace, Four RFID-capable tablets, One RFID gate reader, One vehicle-mounted RFID reader, Octave-led training sessions

Key benefits:

- Mapping and zoning laydown yards, expediting picking
- Loop Material Readiness methods five times faster than existing processes
- Loop Material Readiness identified and located
- $20K of materials that hadn't been issued a receipt

Introduction

A leading chemical company contracted an engineering group to construct a new linear alpha olefin unit. This expansion increased production of the existing plant by 20% and contributed to the company's larger goal of reaching 1,000,000 metric tons per annum.

Loop Material Readiness scope

We were contracted to deploy the Loop Material Readiness track and trace solution for 10,300 pipe spools and a 626-item structural steel work package. This active RFID deployment consisted of four rugged tablets, one gate reader assembly, one vehicle-mounted reader (VMR) and the time to train the engineering group's staff on using Loop Material Readiness.

An Octave System Coordinator (JSC) was brought on board to complete the requested 200-hour extension with a focus on training.

Site set-up

As part of the deployment, the JSC uploaded high-resolution imagery and created maps and zones for five laydown yards and a new off-site area, "Blimpyard". The addition of these zones was key to expediting picking by the field crews.

The field crew had concerns about Loop Material Readiness and the notion that it provided nothing more than a tag number. The concerns were managed by importing data from the client's existing system and adding size, length and weight into descriptions. This, in tandem with the newly mapped zones, was reported by the field crew as "five times faster" than existing processes.

The Material Manager's experience with the existing system helped the JSC search for materials whose status didn't match what was reported. For example, the engineering group used Loop Material Readiness to identify spools that hadn't been received in the system but were noted as "on-site". Identifying these spools helped locate $20,000 of materials that hadn't yet been issued a receipt.

Example of success

After comparing existing shipment and receipt data, it was discovered that a large number of pipe spools were listed as "shipped" in the existing system but had not yet been received on-site. The discrepancy led the client to send an employee to site to locate the missing spools. Their employee arrived with the intention to reference drawings and then attempt to locate the spools visually among all five laydown yard spaces. However, the JSC opened Loop Material Readiness, referenced the spools and quickly found 31 of the 47 spools—more than $25,000 of material. This moment served as a powerful Loop Material Readiness demo to both the engineering group and the fabricator.

Deployment

Tablets

Built to withstand harsh environments, rugged tablets extend track and trace functionality into the field.

RFID Tags

Active RFID tags automate material identification and tracking throughout the material's lifecycle.

Gate Reader

Gate readers automate data collection through shipping, receiving and intra-site transfers.

Vehicle-Mounted Reader (VMR)

VMRs provide automatic material location updates as they sweep the laydown yard.

Octave System Coordinator (JSC)

JSCs offer "boots on the ground" support to help realize the highest ROI from Loop Material Readiness.

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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