



CASE STUDY

Shutdown/turnaround project

Centralizing data for multiple workers



Key facts:

Industry: Chemical

Octave products used:

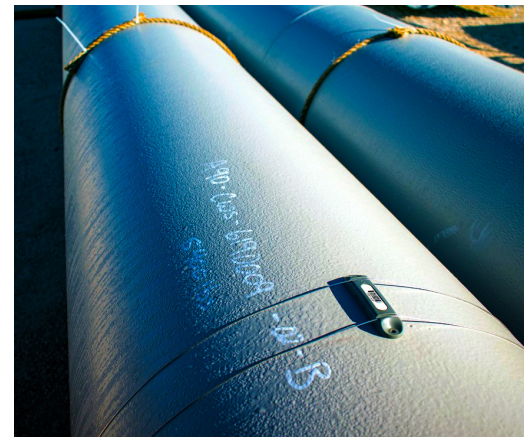
Loop Materials
Readiness (*Jovix*),
300 passive RFID tags,
2 TSL barcode
scanners, 2 tablets, 4
smartphones

Key benefits:

- Tied together multiple plant operating disciplines in short timeframe to accomplish goals as a single unit
- Improved material visibility by status and location
- Streamlined shipping and receiving processes

Challenges

- Needed to centralize information for 15 workers
- Needed improved material status and location visibility for 252 shutdown/turnaround (SD/TA) materials, located both on- and off-site
- Needed ability to tie together multiple plant operating disciplines within a short timeframe and accomplish overall goals as a single unit
- Mismanaged critical shutdown materials could potentially cost owner \$100,000 per hour
- Needed a streamlined shipping and receiving process
- Needed to train workers to use Loop Material Readiness for simple implementation across all locations



Material in laydown yard with passive RFID tag

Project specifics

- Execution timeframe of 3 months
- 252 SD/TA materials to be tracked on- and off-site
 - 144 valves
 - 87 pieces of equipment
 - 21 spools
- 15 Loop Material Readiness users

The Goal? Efficiency & visibility

Solution

The Material Readiness[®] solution was a monumental cost savings considering that temporarily lost materials or startup delays could have led to potential costs of \$100,000 per hour. The hardware included 300 passive RFID tags and 2 TSL barcode scanners. The owner supplied two mobile tablets and four Android™ smartphones.

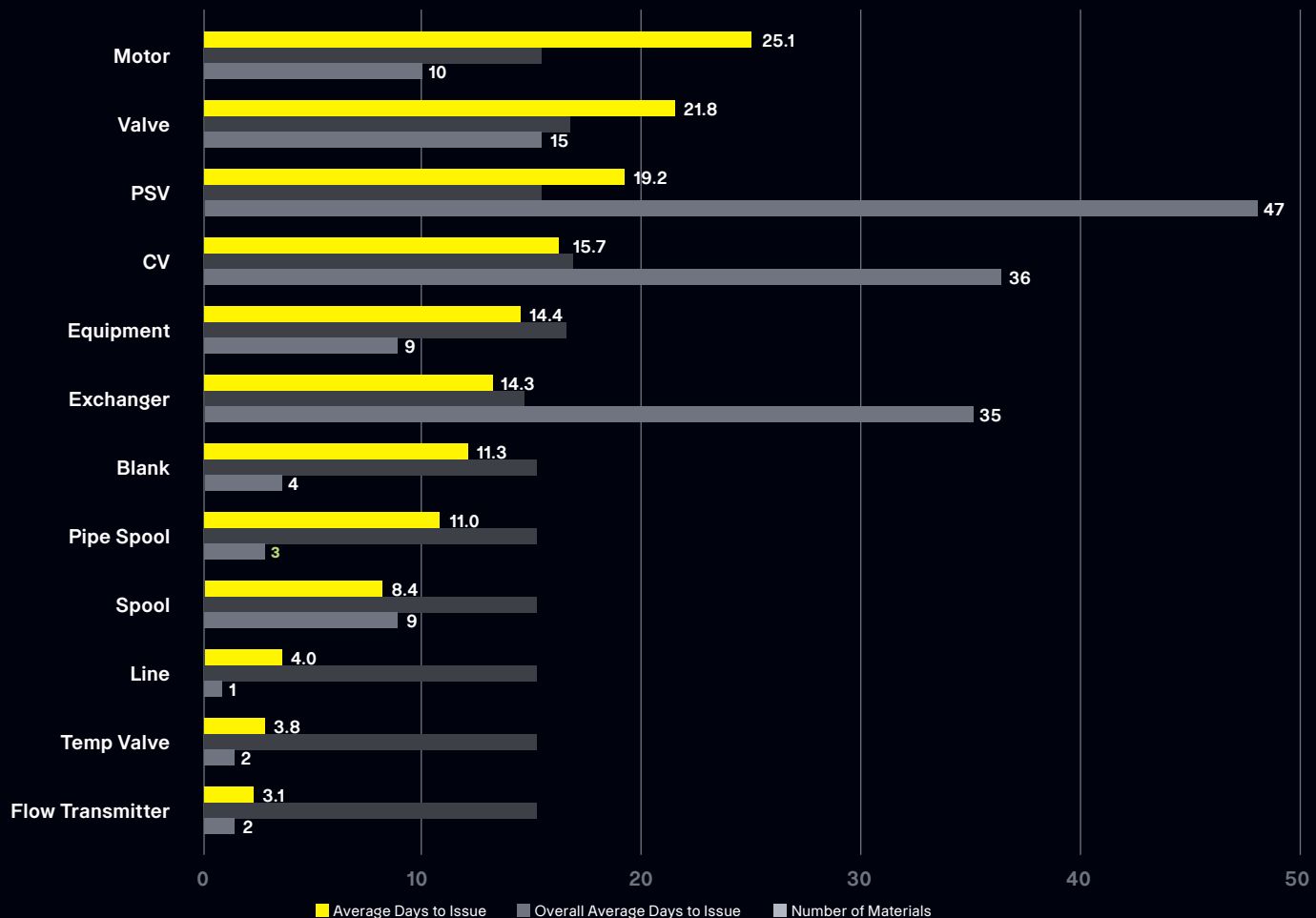
The project leveraged digital and real-time analytics to allow for precision workface planning and a live, centralized database for material and asset status and location. This kept project scheduling from chasing down materials during critical moments. This proved to be crucial, considering that the materials were transitioning through 15 different geographic locations.

Octave was able to help the client improve its shipping and receiving process with advanced notice of materials arriving on-site (What? How many? Priority?) and automated confirmation of shipped materials with the use of a gate reader at the facility entrance.

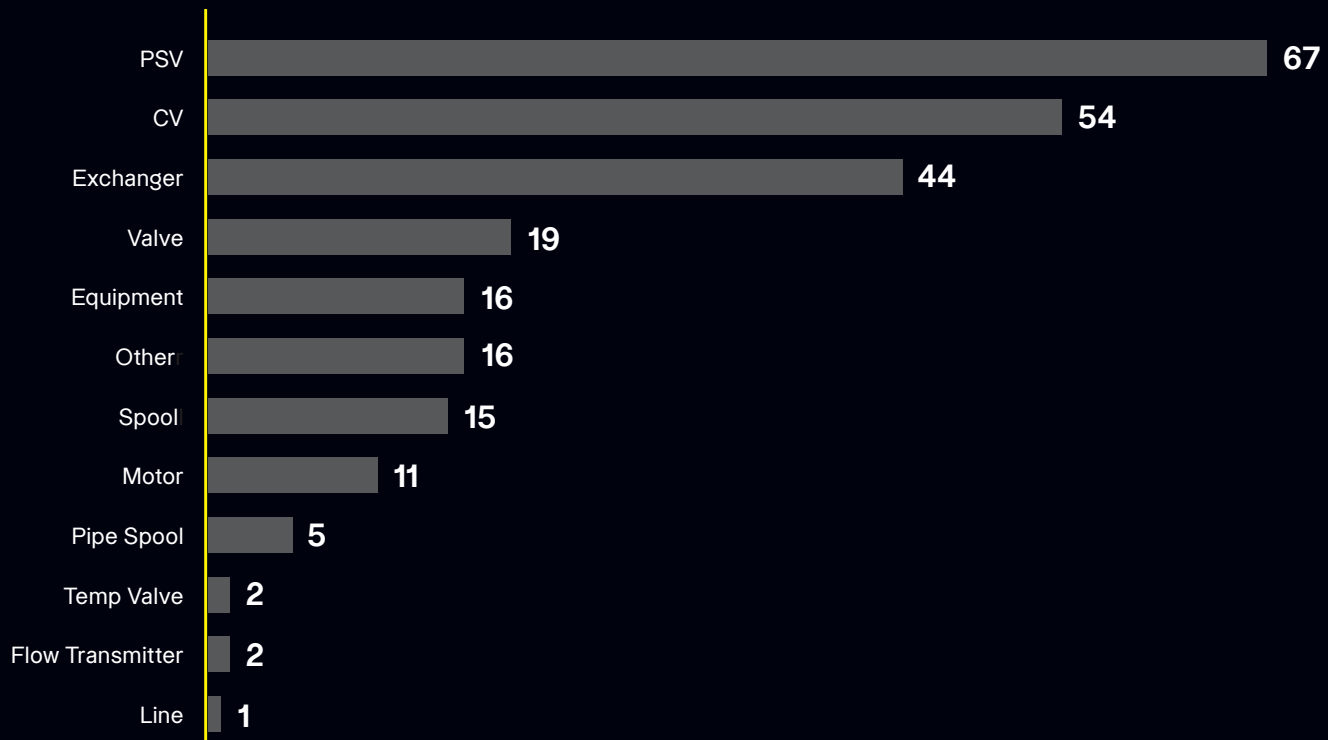


The value of Loop Material Readiness lies in the true visibility from planning to logistics to off-site calibration to material handling and staging to installation. Octave is able to help the client connect priorities with actionable decisions while executing the work.

Average days to issue by material type



Material count by type



Future SD/TA utilization

The project enjoyed great success. Additionally, the customer was able to visualize additional opportunities to drive value to maintenance and operations by using Loop Material Readiness.

Flange management:

This could provide actionable data for wrench time analysis, schedule updates, line and equipment updates, etc.

Pre-work scaffold data:

- Erection/release dates
- Regular inspection requirements
- Modification dates, turnover and maintenance

Permit tracking:

A permit barcoding system helps to determine who pulled the permit, when and where it was pulled and how long it was out.

On-Site Fuel management:

This will help determine which units were filled, where they were filled, how often they were filled and how much fuel was used.

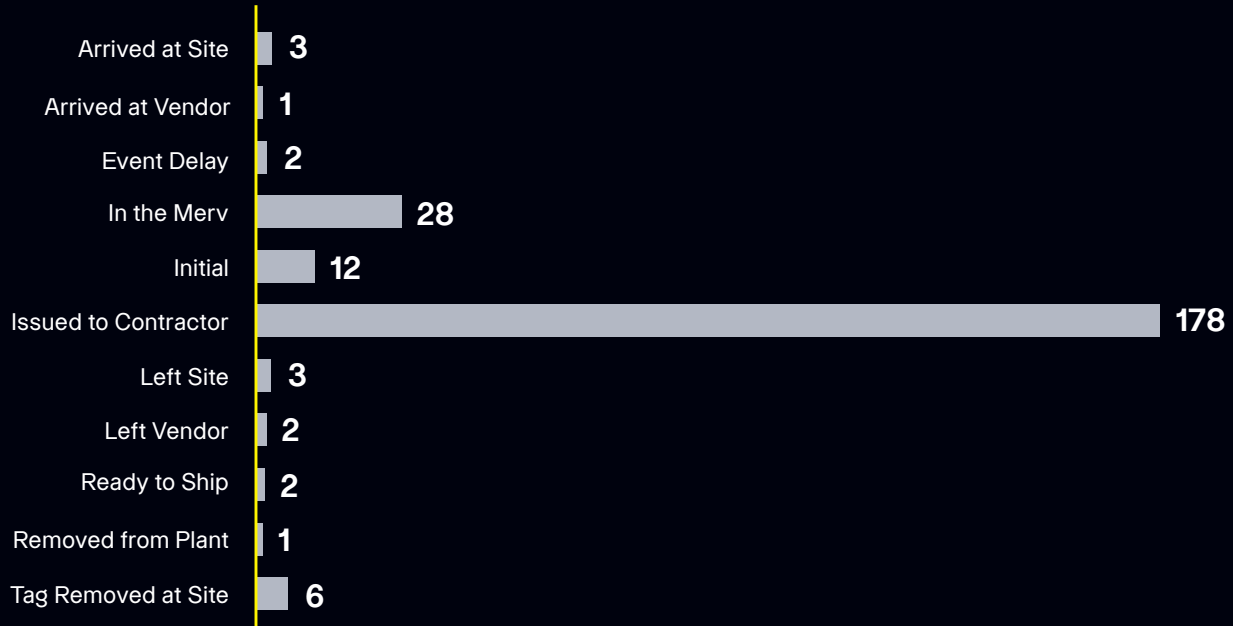
Integration with Oracle's Primavera P6:

This integration will automatically feed prioritized information to the centralized system of truth.

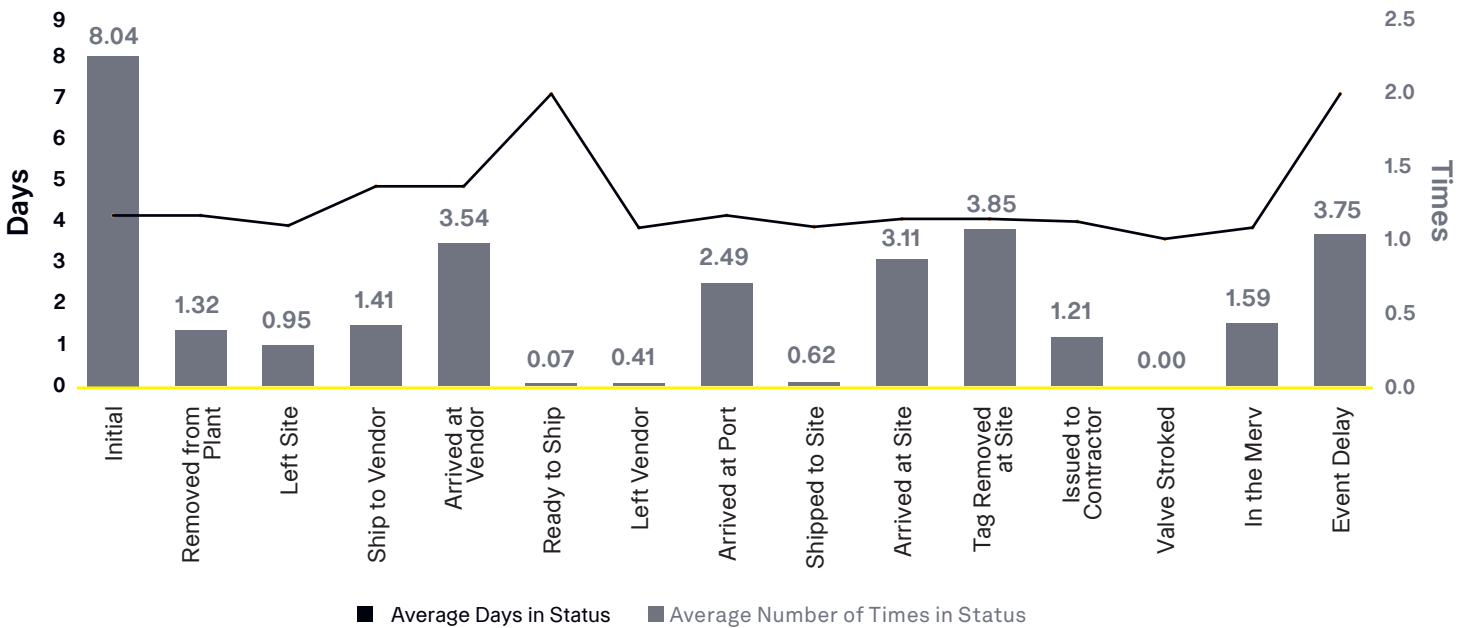
Attach equipment reports and data to specific materials for easy turnover:

- Vendor documentation
- Shipping bills
- Mud books
- MTRs

Count of materials in current status



Average days in status



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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