CASE STUDY:

Global Exporter of Liquefied Natural Gas



OVERVIEW

Global exporter of liquefied natural gas digitally automates inventory management for MRO spare parts to achieve transformative gains in accuracy, efficiency, speed and labor utilization.



Scan code to read the full case study



SNAPSHOT

INDUSTRY:

Oil and Gas

ENVIRONMENT:

SAP 6.0

APPLICATIONS:

Inventory
 Management (MRO)

CHALLENGES

- 1 Inefficient, unsustainable inventory processes without barcoding
- 2 Cumbersome inventory look-up necessitated additional training time
- 3 Timely maintenance difficult with lack of visibility and slow workflows

GOALS ACHIEVED

- 1 Automated spare parts inventory management for MRO
- 2 Improved inventory accuracy and labor utilization
- 3 Increased speed of warehouse materials management up to 400%
- 4 Mobilized warehouse workforce with barcode scanning at point of use
- 5 Simplified and shortened new employee training time

THE CHALLENGE

A global exporter of liquified natural gas (LNG) originally used IBM Maximo inventory and materials management software in the warehouse for its barcoding functionality. Following a merger, the company transitioned from Maximo to SAP but lost its barcoding functionality in the process. This meant a return to using manual processes to manage spare parts inventory for maintenance, repair and overhaul (MRO) operations.

Its warehouse supervisor and materials manager explained the problem: "Any time you try to run a warehouse without barcode scanning ability, you're going to run into a lot of issues. We had problems identifying material and locations, and we had to write inventory labels by hand."

Further complicating the situation was the fact that the warehouse team maintained over 10,000

items in stock with more than 20,000 material numbers in SAP, but these numbers were different from the existing Maximo numbers for material, warehouse locations and bins.

"In order to look up an item in SAP, we would have to know the SAP number, and then translate that into a Maximo number so we could go out and physically find that material in the warehouse. It was very cumbersome," says the warehouse supervisor.

He knew their current inventory management methods were not sustainable, and so set out to find a new barcoding solution with seamless integration into SAP.

THE SOLUTION

In order to restore barcoding functionality, the LNG exporter first investigated the possibility of adding modules to SAP, but found the combination of modules, licenses, training and support would be too costly.

Instead, it turned to RFgen
Mobile Foundations for SAP,
a suite of pre-built enterprise
mobility apps that uses bidirectional information exchange
to communicate with SAP in real
time. RFgen offered a short ROI
period with a lower total cost of
ownership in comparison to more
burdensome alternatives.

Not only does RFgen provide the barcoding functionality the company required, but easily integrates with Loftware labeling software and mobilized inventory processes, maximizing the benefits of automation throughout the warehouse.

Setting up an effective barcoding platform is 50% process and 50% technology. The RFgen Business Analysis Workshop (BAW) helped the warehouse supervisor examine his businesses processes in detail and improve those processes as they implemented their new RFgen solution.

"I sat down with my RFgen senior ERP consultant and she helped me identify all of the transactions we wanted to use," he explains. "Then we talked our way through each transaction step-by-step. She was very knowledgeable. She came up with ways to make our processes even easier."

THE RESULTS

The global exporter of liquefied natural gas successfully adopted RFgen for warehouse mobility and managing of spare parts inventory that supports maintenance and repair operations (MRO), streamlining inefficient processes and positioning the company for future growth and profitability.

The most significant benefits experienced include:

Real-time Inventory Delivers Accuracy and Speed

RFgen enabled the company to shed manual inventory processes that relied on paper processes and redundant data entry in favor



of digital automation and mobile barcoding. Now the warehouse team can receive, issue, store and pull inventory at the point of use instead of making notes on paper before returning to fixed SAP consoles to enter the information. Additionally, workers no longer must make confusing translations between Maximo and SAP numbers.

The warehouse supervisor explains the dramatic difference:

"Before, you would go out and look at the items the truck dropped off, and then you would have to go into the office and sit down at your desk in front of your computer to try and receive them on an SAP terminal. Now, everything is point of use. You can receive them out as soon



Having RFgen on mobile devices provided a double benefit, first eliminating the 600-foot commute between office and receiving dock to manually enter inventory data, and second by removing the need to rely on tribal knowledge or individual memory for received items and bin locations. RFgen's certified integration with SAP effectively puts the power and functionality of the ERP in the hands of warehouse workers when and where they need it.

as the truck drops them off. You know right then and there if something is wrong with the packing list because you have the PO and what we ordered in your hand, on the scanner."

The result is highly improved accuracy, accelerated operational speed and overall cost savings.

"Speed has increased three to four times," he says.

Reliability with Seamless, Certified SAP Integration

The company has been very happy with the integration of RFgen, stating that "RFgen integrates very well with SAP." Because RFgen is version independent and does not install on the SAP server or impact the SAP environment, it also does not get in the way of SAP upgrades. These attributes have led to smooth, reliable performance and uptime.

"We don't have any issues, especially for the user side," explains the warehouse supervisor. "When my warehouse workers log into the scanning devices, they log in as if they are on an SAP terminal. Whatever permissions I've given them in SAP are the same permissions on the scanner."

He fully expected to spend time working out bugs in the new software during the "settling in" period. With RFgen, he did not encounter these issues.

Faster, Easier Training in a Fraction of the Time

RFgen not only greatly simplifies the entire materials management process for the current team but makes training employees on the new system easy as well.

"RFgen greatly simplifies the entire process," explains the warehouse manager. "Before, we had to know what T codes we were going to punch in to navigate in SAP. Now, it's all menu-driven right off the scanner. Even someone who isn't SAP

savvy can use RFgen scanners because they're labeled exactly with what you need."

He feels that RFgen's intuitiveness and ease of use helps reduce training time for new employees to a minimum. "Training RFgen is the easiest part," he goes on to say. "Now I'm able to train new people in just one or two days versus weeks before. Depending on how much warehouse experience they have, I have to do more training on how the warehouse works than RFgen."

THE BOTTOM LINE

After a smooth implementation and rollout of RFgen at the company, the warehouse supervisor has been happy with the improvements in his warehouse operations.

He explains: "With critical items, when we do go down, we have to come right back up. Otherwise,

we could lose a lot of money. RFgen helps us ensure we have parts on hand when we need them, in the correct quantities. That's critical to our operations."

When asked how RFgen had impacted their warehouse, he replied: "RFgen increased the efficiency of materials management processes, improved labor utilization and boosted warehouse speed and inventory accuracy."

"RFgen saves cost by enabling us to efficiently manage inventory," he concludes.

LOOKING AHEAD

The LNG industry is on the cusp of rapid growth as global energy demand for natural gas continues to grow. In the next several years, they anticipate the company might face five or more new competitors.

"We'll have to get even more resourceful in delivering LNG at the lowest cost possible," says the warehouse supervisor. "Managing inventory costs will be a part of the company's strategy to maintain marketplace leadership in the LNG industry."

To support these competitive initiatives, RFgen continues to partner with the company to expand functionality of the platform. Plans are already in motion to add more inventory transactions, fine-tune the PO Receipt process and provide the ability to receive material into what is known as 'inspection stock' or 'blocked stock' where it can be inspected for quality.

"Whenever we ask for additional capability, everyone at RFgen is so willing to help," recalls the warehouse supervisor. "It's refreshing. Sometimes when I call vendors, I get the feeling they are not interested in us. We never get that feeling from RFgen."

