

CASE STUDY

Improving processes, reducing costs



Advanced technology provides comprehensive global solution to improve visibility, optimization of industrial tank assets

Challenge Summary

When the global leader in thermoset resins, Hexion Inc., realized the multiple issues they faced with the management of their fleet of ISO-tanks, they turned to PSA BDP to implement advanced technology solutions.

Services & Technologies Used

- ISO-tank fleet management
- Global Control Tower with Smart Tower
- Ocean freight forwarding
- Supply chain visibility

The Challenge

The global leader in thermoset resins was faced with a number of major issues associated with management of their fleet of ISO-tanks -- industrial tanks used for shipping chemicals and other industrial liquids/gases around the world.

Issues included minimum visibility of the status of cargo and shipments after purchase orders were placed with suppliers, as well as no visibility on damaged tanks. Multiple Excel spreadsheets were maintained with no real-time overview of client's assets.

Imports clearance and exports issues resulted in ISO-tanks idling in various locations, incurring high detention and demurrage costs. Plus, more tanks were being leased than required.

Return of containers from destination countries were not booked based on the manufacturer's global

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- Rien de Bil, Hexion Senior Global Procurement Manager

contracted carriers, causing higher ocean freight cost and destination port charges. Tank certificate expiration was not recorded, resulting in shipping lines not accepting empty return tanks.

The Solution

A global control tower using Smart Tower and PSA BDP's global network was recommended by Luc Wellens, PSA BDP Director of Sales for Europe. Working with Ang Seng Peng, PSA BDP Director of Sales for Asia Pacific, Wellens emphasized how the control tower could help the manufacturer. Smart Tower is a complete management service that improves visibility and optimizes utilization of tank assets: ISO-tanks and multiple element gas containers (MEGCs). Wellens outlined Smart Tower's four principal components:

- End-to-end outbound and inbound logistics as well as proactive planning and management for the reverse logistics of empty tanks to ensure they are returned on schedule.
- Proactive exception management based on predetermined lead times for issuing pre-alerts and alerts for foreseeable near-miss events.
- Centralized management, monitoring and global visibility of the equipment including daily movements and asset availability.
- Management and coordination of preventive maintenance and repair to reduce equipment downtime.



Hexion's Senior Global Procurement Manager Rien de Bil said, "We initiated a global Freight Forwarding tender and [PSA BDP] came out as the best party to work with in terms of logistics and flexibility, as well as its good internal global organization and network of offices."

"The selection of the Smart Tower asset management tool was driven by our move to a shippers own fleet and we needed a tool to flow and structure costs," he said.

"Hexion can rely on [the team] to track all of the transportation and logistics milestones to help improve velocity and turnaround of their tank assets," Wellens said. "It is about simplifying and improving the management of those assets."

"That's important when you consider the high cost of a single tank, which can be USD\$150,000-\$300,000," Wellens added. "It is estimated that under-utilization of these containers could be costing chemical and oil and gas companies more than \$1.5 billion a year in unrealized revenue."

Improving processes, reducing costs

Seven PSA BDP offices are involved in managing Hexion's fleet through Smart Tower. During phase one, PSA BDP Taiwan managed ISO-tanks shipped from Taiwan to the U.S., Canada and Brazil. PSA BDP Shanghai coordinated with the leasing company to make sure tanks were ready to meet the demand from the supplier in Taiwan. PSA BDP's experience working with ISO-tanks and the manufacturer significantly enhanced the export process from Shanghai.

Phase two of the operation was managed by PSA BDP Korea, which oversaw every single milestone in the round-trip process. PSA BDP Canada ensured the round-trip SOPs were mapped out, and also recommended shipping by rail instead of truck to reduce logistics costs. A third phase included transition to other regions.

PSA BDP's expertise in managing different types of tanks, including valve connection specification required by both shipper and consignee, was important. Immediate visibility of the PO status and cargo readiness from shipper was emphasized.

PSA BDP stressed the accuracy of import and export declaration with the respective local Customs departments, so that during the re-export process individual tank numbers are deleted from the Customs systems. Failure to do so would require the re-exporting party to pay for duties and taxes as each tank is treated as a separate commodity.

Full shipment visibility at origin and on the return through Smart tracking was emphasized. BV certificate expiry dates are recorded in Smart Tower so that re-certification is done in a timely manner to ensure tanks are not held at destination offices when expired.

PSA BDP recommended damaged tanks be repaired immediately to increase the tanks' turnover rather than idling due to damage, as well as checks and balances at various points of the process to record the physical condition of the tanks.

Customer Benefits

Improved visibility, velocity, availability and turnaround of ISO-tank assets

Global expertise and a proactive approach

Systems excellence to support business goals

Increased efficiencies in operations

Cost management and reduction

Transportation solutions

PSA BDP proposed all booking at both origin and destination with Hexion's global contracted carriers to provide cost savings of at least US\$200-400 per tank, resulting in direct annual savings of over US\$200,000.

As for the need for visibility on status of cargo and shipment after a PO is placed with the supplier, de Bil said, "It gave us greater visibility, cost management, and utilization – everything related to our fleet management. [The team] also provides a forecast of tank availability, which enables us to have tanks, where and when we need them.

"Clearance at the ports to avoid or eliminate the possibility of demurrage is important to Hexion. They provide monthly reports -- information related to our shippers own fleet. Plus options to improve our process."

Winning combination

What features of PSA BDP's asset management tool stand out for Hexion?

"Good visibility, cost management, full structure, and logistics opportunities for imports and exports," de Bil said. "We are now using [PSA BDP] for global services -- a full operations system. We have a global account manager who handles all issues – this gives us one person we can contact for all issues. It is very efficient for us."

What are the benefits of the PSA BDP relationship for de Bil?

"[Their] global expertise and a full understanding of the Hexion process. We have a partnership, a proactive approach -- [they] have the right people on board. We now have more visibility on what is going on in the market, what and where are we shipping, how we ship, and where we need to improve," he said.

"As a service provider, [PSA BDP] helps us serve our customers, which helps us with our client retention. Also, I am now involved in a minimum of logistical issues thanks to [the team] working directly with our business staff," de Bil stated.

"As we grow, expand and adapt we feel [PSA BDP] will meet those needs, too."