

Case Study: Automotive Vendor Managed Inventory Plexco (Australia)

Background

Plexco International AG is a Tier One supplier to the world's leading automakers. The company makes audio systems, lighting systems (tail lamps, turn signals, and interior lighting) and vision systems (interior and exterior mirrors). Privately held, Plexco is based in Esslingen, Germany and operates plants in Europe, Asia and North America.



WorldLogistics' relationship with Plexco began in Adelaide, Australia in the early 1990s with the provision of local forwarding to Brittex. By 1995, the local forwarding function had expanded to encompass the entire Australia market. Plexco purchased the vision systems division of Brittex International in June of 2000. As a result, Plexco now controls the automotive rear vision market within Australia, and about 30 percent of the world market.

WorldLogistics continues to assume increasing responsibility for Plexco's growing global air and ocean forwarding requirements. Freight forwarding services include air and ocean forwarding in Asia, the Indian subcontinent, North America and Europe. WorldLogistics operates Just-in-Time (JIT) warehouse hubs on behalf of Plexco in Adelaide, Australia, Southampton, U.K. and Detroit, Michigan. These highly specialized logistics activities complement the services WorldLogistics provides to other automotive customers that are Tier One suppliers to Ford, General Motors (GM), Isuzu, Jaguar, Saab and Volvo.

Locations

Worldwide activity with JIT hubs in Australia, U.K. and the United States.

WorldLogistics Services

Global air and ocean freight forwarding, JIT deliveries and hub warehousing including Vendor Managed Inventory (VMI) programs in Australia, U.K. and the United States. Additional value-added services include repair services.

Objectives

- Reduce Plexco's inventory and warehousing costs, while improving supply chain efficiencies.
- Optimize the company's supply chain by keeping tighter control on inventory requirements through the VMI program.

Solution

At the WorldLogistics warehouse in Lonsdale, Australia, just south of Adelaide, WorldLogistics fully manages the Plexco inventory of exterior automotive mirrors, as well as related parts and supplies in a formal VMI program for Plexco. The 20,000 square foot facility is dedicated to supplying Plexco's production plant, located a short distance away. By outsourcing its warehousing operations to WorldLogistics, Plexco uses the former warehousing space at its Lonsdale plant for productive manufacturing activities.



“A key Plexco strategy is to establish vendor partnerships based on mutual benefit and confidence in delivery performance. We believe the Plexco/WorldLogistics partnership is a clear demonstration of this model,” says John Blood, materials director for Plexco Vision Systems.

Since the WorldLogistics facility opened in May 2002, results have been dramatic in time and cost savings to Plexco and its Australia base of some 40 suppliers. Much of the success of the program is attributable to WorldLogistics' warehouse management system, ASSETS. WorldLogistics customized the ASSETS system to a real-time Web-hosted environment, called the JIT Web, which links the Australian operations of WorldLogistics, Plexco and its suppliers for total supply chain visibility. The system uses radio frequency (RF) scanning technology to completely automate inbound receiving and the outbound deliveries to Plexco's nearby assembly plant. The RF system manages some 400 part numbers or SKUs (stockkeeping units), capturing shipment and part information, for locating inventory to the SKU level.

“By accessing the JIT Web with secure pass codes, the supplier goes to the Internet and sees their parts are in the warehouse,” says Paul Hurd, global account manager with WorldLogistics Australia. “The visibility is everything to Plexco and its suppliers. The whole thing wouldn't work without a high level of visibility combined with quality information,” Hurd adds.

“The services we provide Plexco are very high velocity and support its Kanban system. Every three hours we resupply the Plexco (production) line, Monday through Friday from 5:30 a.m. to 11 p.m.,” Hurd explains. During these intervals, Plexco sends pull requests or Advance Shipping Notices (ASNs) to the ASSETS system showing required materials for its assembly operations. Materials are pulled on a first in, first out (FIFO) basis and prepared for pickup by Plexco for delivery in sequenced order to the plant.



Plexco scans the materials into its internal system which sends a “Goods received” number or AR signal to the system. “It completes the loop. Every supplier has access to the JIT Web to see only their shipments and to manage their supply chain with Plexco,” Hurd says. Suppliers can use the system to generate reports and invoice information. Hurd stresses the operation has improved Plexco’s cash flow because of JIT warehousing and Kanban production: materials

do not sit for long before they are used. Stock is usually turned over at the WorldLogistics warehouse within three or four days, and most materials are used within hours at the Plexco plant. Plexco exports considerable volumes of automotive mirrors from its Australian facilities to the United States, with WorldLogistics managing the forwarding.

Throughput at the WorldLogistics facility is about 500 pallets per day of material with a total capacity of 1,200 pallet positions. Some 10 WorldLogistics employees are dedicated to the hub operation.

Prior to outsourcing its inventory warehousing to WorldLogistics, Plexco had no supply chain visibility. The old process involved calling the supplier for status information, resulting in little planned production. Through the JIT Web suppliers are given schedule leads of up to six months. In addition, suppliers are immediately notified when minimum or maximum stock levels are reached. “If they do fall below minimum, it triggers an e-mail to the supplier. If replenishment stock isn’t received in another three days, the system automatically sends another alert e-mail,” Hurd says.

Blood of Plexco notes the partnership with WorldLogistics has netted immediate short-term and long range benefits. “We look forward to continued success and the implementation of programs in other locations worldwide,” Blood says.

IT Systems

The Australia operation is one of the first WorldLogistics locations worldwide to use a completely Web-enabled real-time system, the JIT Web, as a customized version of WorldLogistics' ASSETS software. ASSETS is a component of WorldLogistics' comprehensive supply chain solution, WorldVista, used to varying degrees worldwide for the Plexco account.

WorldVista incorporates all major aspects of the supply chain process through these tools: ORDERS (order management and order tracking), ASSETS (warehouse management) and CONTROL (transportation management).



Results

- Since the 2001 launch of the VMI program in Australia, WorldLogistics has reduced average delivery times from three hours to two, while increasing its average number of line picks per day from 185 to more than 300.
- WorldLogistics has improved the process for quality inspections and rework-repair of products to include alerting procedures to Plexco and the supplier.

Worldwide, the JIT programs for Plexco at the three WorldLogistics warehouses result in:

- Plexco, its suppliers and OEM customers are afforded greater visibility of stock, order prioritization and shorter delivery times.
- Suppliers to Plexco achieve inventory optimization, saving on overstocks and premium transportation to rush product to plants.
- By outsourcing significant logistics and warehousing operations to WorldLogistics, Plexco is able to decrease its inventory levels and inventory holding costs, resulting in improved financial returns to the Tier One supplier. As a result of the tightly integrated global supply chain, Plexco and many of its global suppliers increasingly look to WorldLogistics for logistics solutions.

Keys to Success

- WorldLogistics performs quality checks on shipments and engineering changes, when necessary, particularly for assemblies and mechanical items prior to delivery to Plexco.
- Direct access by Plexco and Australian suppliers to WorldLogistics' ASSETS system ensures order integrity and shorter response times.
- Coordination with Plexco production plants for short delivery lead times on an automated basis results in improved supply chain visibility, and ensures Plexco's performance in the automotive vision systems and lighting marketplaces.



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