



Dedication at every turn.

CASE STUDY

Navistar

Understanding the business is critical in selecting a lead logistics provider

Navistar is a leading producer of commercial trucks, mid-range diesel engines and IC brand school buses, workhorse brand chassis for motor homes and step vans, as well as a private label designer and manufacturer of diesel engines for the pickup truck, van and SUV markets. They needed logistics services from a provider who understood the fundamental differences between the manufacturing and distribution of cars and trucks. Penske's unique combination of automotive and trucking experience made it the clear choice. Since then, Penske evolved from a Navistar customer to its lead logistics provider (LLP).

Challenges

- To reduce inbound transportation costs by replacing disparate, plant-managed inbound materials networks with a centralized, single network
- To streamline supplier operations and provide Navistar with real-time supply chain visibility
- To improve plant productivity levels with less labor

Solutions

- Penske designed and implemented a network of Origin Distribution Centers (ODCs) to process shipments of production material for truck and bus manufacturing facilities. Inbound Supply Chain expenditures have been reduced by more than 17 percent annually.
- Penske trained more than 900 suppliers on a uniform set of procedures and logistics technologies. Penske's proprietary logistics management software tracks orders, schedules delivery and pickup windows, determines routes, tracks order and delivery status, and automates invoicing.
- Penske's line-side production support at two plants has increased production by more than 250 percent with only a 25 percent increase in headcount.

Getting Started

Penske had a unique combination of automotive and trucking experience through customer relationships and its trucking division. The company understood the fundamental differences between the manufacturing and distribution of cars and trucks. With more suppliers, parts and customization, the supply chain for a truck manufacturer is much more complex. Penske's

understanding of these core differences made it the most qualified LLP for Navistar's operations.

Decentralization Proves Costly for Navistar's Logistics Operations

Originally, each of Navistar's six manufacturing plants managed its own inbound flow of materials. This network model prevented Navistar from achieving a clear view of products moving throughout the supply chain. With each plant managing its own supply chain operations, Navistar's logistics operations were proving to be inefficient and costly.

With manufacturing plants located throughout North America, Navistar's switch to the LLP concept would not happen overnight. Navistar decided to first implement the LLP concept in the Southwest corridor of its North American operations. The Southwest corridor demonstrated the longest portion of the company's supply chain, presenting the greatest opportunity for cost savings.

Penske deployed a team of logistics engineers to analyze Navistar's current supply operations. Penske concluded that a centralized logistics operations strategy would net an 11.7 percent savings in the company's overall inbound transportation costs. With Navistar's approval, Penske developed a new network model and logistics strategy.

Bringing Supply Chain Visibility to the Southwest Corridor

Transitioning Navistar's operations to a centralized network managed by a LLP required unanimous buy-in from the corporate, plant and supplier levels. To facilitate a smooth transition, Navistar and Penske assembled a team representing materials managers from Navistar's plants, IT representatives, Penske engineers and Penske operations. Together, this group was responsible for implementing Penske's new network model and logistics strategy.

To improve the visibility of parts moving throughout the supply chain, Penske worked with the team to propose the following:

Origin Destination Centers (ODCs) – Penske would leverage Navistar's existing infrastructure to establish ODCs to centralize inbound material shipping operations



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Supplier Training – suppliers would be trained on new shipping, packing and routing procedures relative to the new ODC operations and increased supply chain visibility

Carrier Regulations – new carrier bidding requirements and regulations would be established to ensure quality carrier participation

Technology Overhaul – Penske would implement its proprietary Logistics Management System (LMS) software to schedule, route and track parts throughout the supply chain

Penske immediately began work on establishing the ODCs. The Navistar/Penske team determined the optimal location for these facilities: Romulus, Mich.; Dayton, Ohio; and Memphis, Tenn. Each ODC would function as a central delivery point for suppliers. Shipments going to the same plant would now be cross-docked into trailers at the ODC and deliveries would be scheduled. The streamlining and consolidation of shipments would allow each truck to carry higher capacity loads. As a result, Navistar could reduce milk runs, less-than-truckload shipments (LTL) and premium freight charges.

The Romulus ODC was launched first, and within five months, all three facilities were up and running. Penske considered Navistar's existing inbound transportation personnel for employment, helping ease the overall network transition.

Before each ODC opened, Penske conducted in-house training for each of Navistar's 900 suppliers. Suppliers were trained on new shipping, packaging, labeling, communication and carrier processes. Additionally, Penske redefined Navistar's carrier selection process by placing stricter requirements on carrier partners. Carriers would now have to meet specific equipment, technological and safety requirements, as well as show an established record of on-time delivery/pickups.

To keep track of each part moving through the supply chain, Penske implemented its proprietary LMS software. The LMS software would track deliveries and pickups, determine order accuracy and handle supplier routing for shipments going from the ODC to the plant.

Using its new ODC operations and LMS software, Navistar now has a streamlined system for shipping, receiving and tracking inbound materials. At the beginning of the week, each plant electronically sends its orders to suppliers and each of the ODCs. Based on these orders, Penske's LMS software automatically notifies suppliers and carriers of the week's routes.

As shipments arrive and leave the ODCs, Carrier Status Reports are generated to track delivery and pick up windows. The system also tracks the accuracy of each order delivered versus the bill of goods originally requested. Through a Web interface, plants and suppliers can track the status of an order throughout the supply chain. Once deliveries are complete, invoices are automatically sent to the supplier and carrier.

"We now have visibility throughout the supply chain - visibility of what the supplier shipped and whether the supplier shipped on time."

Tom Erickson, Director of Logistics & Aftermarket Purchasing,
Navistar Corporation

Successful Network Redesign Equals Lower Transportation Costs, Increased Productivity

Using the LLP and ODC concept, Penske reduced Navistar's inbound transportation costs by more than 17 percent – exceeding its original goal of 11.7 percent. Premium freight expenses were reduced by approximately 12 percent.

Penske's value is also visible at the plant level. By consolidating shipments, plants now assemble and deliver trucks more quickly. Plant production levels significantly increased, reducing the average number of days inventory remains at the plant. For one plant, Penske's operations were reduced on average from 21 days to 11 days.

For Navistar's plant in Mexico, Penske drastically eased the shipment of parts through the U.S./Mexico border.

In addition to its LLP operations, Penske continues to exceed cost down objectives in its production support responsibilities at Navistar's Garland and Monterey plants. Under this contract, Penske is responsible for picking goods stored at the plant's adjacent warehouse and delivering them to the assembly line. Additional responsibilities include putaway and replenishment of all inventories.

Using refined processes and warehousing techniques, Penske enabled both of these facilities to substantially increase productivity using less labor. In the Garland plant, productivity jumped from 35 trucks per day to 120 trucks per day. In some instances, productivity increased by nearly 250 percent, with only a 25 percent increase in headcount.

Penske also delivered its cost savings to Blue Diamond, a joint venture formed by Navistar and Ford Motor Company. As LLP for both Ford and Navistar, Penske utilized its existing logistics network infrastructure and processes established under these customer relationships to reduce logistics network costs.

The success of the Southwest Corridor program increased the breadth and depth of services Penske provides, and they expanded the LLP program to include all vehicle assembly plants throughout North America. The partnership between Penske and Navistar has proven to be a very successful LLP venture. Maintaining its team approach, Penske continues to refine inbound materials processes throughout the supply chain to provide the customer with a competitive advantage in the marketplace.

For more information on Penske Logistics solutions, visit GoPenske.com.