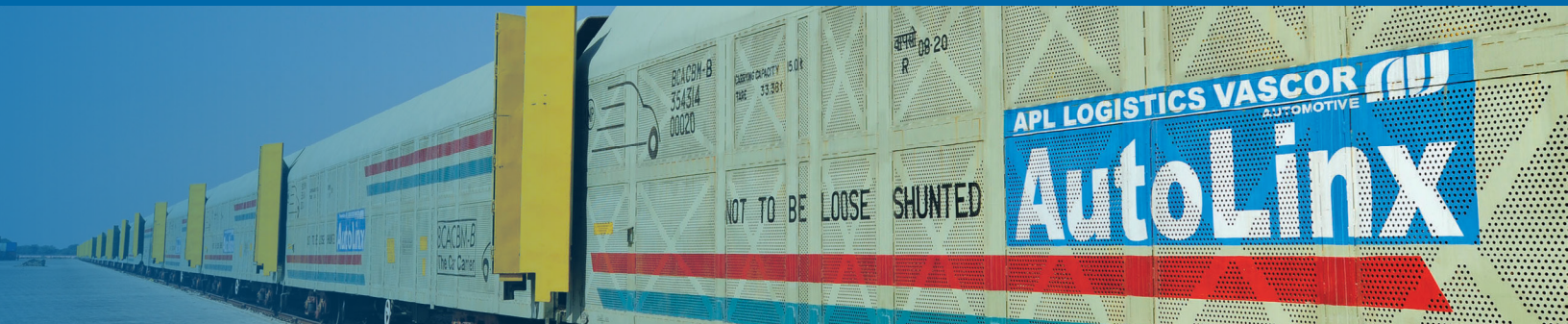


AutoLinxSM — Case Study



APL Logistics VASCOR Brings Multimodal Efficiency To Auto Company's India Supply Chain

When one of the world's leading automotive manufacturers wanted a reliable way to move finished vehicles and service parts throughout India via rail, APL Logistics VASCOR responded by creating that country's first privately owned, multimodal vehicle transportation service.

A Tale Of Rail

Typically, rail is considered to be a highly viable transportation option. But until recently, this was not the case in India – at least not as far as one quality-conscious global company was concerned.

As a leading vehicle manufacturer that had already made extensive use of rail throughout the world, this company was well-acquainted with the mode's many benefits and anxious to apply them within India. However, rail service for vehicles in India was inconsistent, and the only available rail wagons were in such poor condition that the manufacturer was reluctant to use them.

The auto maker spent years searching for a dependable solution with little success, until a change in rail policy – and a 3PL ready to act – put its multimodal aspirations back on track.

"After several years of deliberation, Indian Railways agreed to allow ownership of auto wagons by outside companies," said a source close to the account. "And, in an effort to better serve manufacturers like this one, APL Logistics VASCOR decided to get on board."

In 2012, APL Logistics VASCOR approached the automotive manufacturer with a proposal for a rail-based transportation service. Known as AutoLinx, the service would feature custom-designed, fully enclosed, double-decker rail wagons that had the capacity to carry two rows of vehicles of varying heights, all while affording optimal levels of product protection. Shortly thereafter, the two companies signed a letter of intent, and one year later APL Logistics VASCOR became the first 3PL in India to receive an AFTO (Auto Freight Train Operator) license.

In 2014, with the help of a Purchase Order from the manufacturer, APL Logistics ordered three, 27-car rail rakes, capable of carrying nearly 300 finished vehicles each, to launch AutoLinx. And in November of 2014, AutoLinx took its inaugural trip with a load of the manufacturer's vehicles on board.

Company

One of the world's leading automotive manufacturers with operations throughout India, this company produces a wide variety of high-quality cars and trucks that are sold throughout the country – and in markets globally

Industry

Automotive

Challenges

- Leverage the economies and efficiencies of rail without compromising supply chain quality within a rail system previously not known for excellence
- Improve delivery speed and reliability
- Reduce in-transit damage caused by sub-standard roadways
- Increase available transportation options

Solutions

- Establish a privately operated rail transportation service
- Use adjustable decks within rail wagons to accommodate vehicles of different heights and allow for a mix of small and large vehicles as needed within each wagon
- Negotiate with truck driver population – who might not have welcomed the loss of business that a new rail solution would represent – to procure reliable first-and last-mile transportation
- Provide highly-trained personnel for precise tasks such as product inspection and driving vehicles onto wagons
- Supply high-quality systems for in-transit vehicle tracking

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Many additional successful trips have taken place since then, and today, APL Logistics VASCOR's AutoLinx service provides the manufacturer with:

- Truck pick-up of finished vehicles from the factory via pre-screened transport vendors as well as thorough inspection of vehicles by trained quality inspectors
- Vehicle unloading and yard parking at a specially designed rail loading yard
- Loading onto AutoLinx's double-decker rail wagons via experienced drivers
- Rail transportation across nearly 2,300 kilometers
- Vehicle unloading and yard parking at the destination
- Thorough inspection via trained quality inspectors and loading onto trucks for final-mile transit to dealers in sixteen cities
- Automated e-mails on the status of each vehicles' movement

APL Logistics VASCOR also supplies the manufacturer with similar solutions for the transport of service parts.

Achievements and Advantages

Thanks to APL Logistics VASCOR, this manufacturer now has the more efficient and diverse transportation mix it desired within India, allowing it to enjoy benefits such as:

- **Cost Savings.** Thus far the new transportation arrangement has enabled the manufacturer to reduce shipping expenses.
- **Greater Efficiency.** Due to the greater capacity offered by the AutoLinx rail wagons, the manufacturer can now transport many more vehicles per load than it could using truck transport.
- **Better Product Protection/Reduced Damage.** The enclosed design of the AutoLinx wagons offer the manufacturer a greater line of defense from the weather and other elements. They also avoid damage sustained during long-haul truck transportation across India's roads, many of which are still in poor repair.
- **Improved Sustainability.** Rail shipments emit two-thirds less carbon dioxide than truck shipments. As a result, every mile the manufacturer's vehicles travel via rail instead of truck is a far greener one.
- **Engineering Expertise.** With the help of a loading algorithm developed by APL Logistics VASCOR's innovative in-house engineering team for the AutoLinx service, the manufacturer has been able to optimize each rail wagon's maximum vehicle handling capacity.
- **Systems and Equipment Improvements.** In addition to having access to an innovative rail transportation option, the manufacturer has also taken advantage of APL Logistics VASCOR's best-of-class approach to systems and solutions. For example, its yard management and vehicle loading is now executed with the help of cellular-enabled, hand-held equipment that allows for real-time data collection and swift data transfer to FVOS, APL Logistics' VASCOR's robust operating system. Plus as a result of FVOS, it enjoys real-time visibility and the ability to integrate with OEMs' systems.

About APL Logistics VASCOR Automotive

APL Logistics VASCOR Automotive is a Delhi-based third-party logistics specialist offering rail and container transport solutions, vehicle distribution centers and import/export logistics. Incorporated in 2012, the company is a joint venture of two of the most respected brands in international supply chain management and automotive logistics respectively: APL Logistics and VASCOR

Systems Solutions

- Our APL Logistics VASCOR Engineering team worked hard to develop a sophisticated loading algorithm to achieve optimal load capacity for maximum vehicle count
- Our yard management and rail loading is done with hand-held equipment that is cellular enabled to allow for real-time data collection. This data feeds the FVOS system for real-time visibility
- We've integrated the FVOS system with many of our customers systems to provide frequent updates
- The FVOS system has been in use in North America for over 10 years and is well tested for the automotive industry

Services

- Customized Solutions Design
- Quality Assurance
 - Detailed Product Inspection at Origin and Destination
- First-Mile Transportation
 - Pick-up of finished vehicles From the Factory
 - Product Loading onto Trucks
 - Management and Procurement of Over-the-road Trucking Vendors
 - Over-the-road Transportation
- Yard Management
 - Vehicle Unloading
 - Yard Storage
 - Yard Design
- Intermodal Transportation
 - Product Loading at Origin Terminal
 - Double-deck Rail Wagons with Adjustable Decks
 - Rail Transit Between Chennai and the Delhi Area
 - Product Unloading at Destination Terminal
- Last-Mile Transportation
 - Product Loading onto Final-mile Delivery Trucks
 - Over-the-road Transportation to Dealers
- Engineering Support
 - Train Loading Optimization
- Systems Support
 - Hand-Held, Cellular Loading Devices
 - Real-time Track and Trace
 - E-mail Shipment Notification