CASE STUDY

General Motors de Mexico

Driving efficiency

Penske Logistics has a long history as a supplier to General Motors (GM). With a reach that extends to more than 60 countries, logistics is no small challenge for GM. General Motors de Mexico (GMM) is GM’s Mexican subsidiary and a vital part of GM’s North American operations. GMM selected Penske Logistics to be its lead logistics provider (LLP) to help drive efficiency throughout all aspects of its distribution network. Within the first six months of the partnership, transportation costs had already been significantly reduced. And, more improvements were underway, including the implementation of proprietary software to provide instant access to real-time updates from every supply chain participant.

Challenges

• To reduce costs and inefficiencies in GMM’s growing inbound transportation network
• To increase overall visibility throughout GMM’s supply chain
• To establish accountability procedures and measures for GMM’s suppliers and carriers

Solutions

• Within six months, Penske had reduced transportation costs by 15 percent
• Penske implemented its proprietary Logistics Management System software to provide instant access to real-time updates from every supply chain participant, enabling proactive resolution of supplier and carrier issues
• Penske reduced GMM’s carrier base from 100 carriers to 20 within the first year. The rate of on-time supplier pickups has increased to 98 percent, while delivery rates are at 99 percent

Getting Started

GMM works with more than 1,700 suppliers that produce approximately 13,000 parts a day. From railcars to chartered planes, the company’s transportation network is sophisticated and complex.

GMM selected Penske Logistics to be its lead logistics provider (LLP). The fit was a natural one. At the time, Penske Logistics had served as LLP for several of GM’s U.S. operations and had managed border crossings in Laredo, Texas, for nearly two decades. With an acute understanding of the Mexican culture and GMM’s operating principles, Penske Logistics had a head start on helping GMM drive efficiency throughout all aspects of its distribution network.

Creating Collaboration Across the Transportation Network

Previously, GMM internally managed its complex transportation network, which consisted of eight operations on three sites in Ramos, Toluca and Silao. As higher demands continued to be placed on GMM’s production and distribution operations, its transportation network lacked collaboration. In effect, each operation was making individual logistics decisions, creating costly redundancies and inefficiencies throughout the supply chain.

As LLP, Penske was challenged with reducing costs and improving efficiency in GMM’s inbound transportation operations. Penske would now manage the inbound transportation of materials to each of the plants, as well as manage GMM’s carrier relationships.

Penske presented a three-phase plan to be implemented within the first year:

Phase 1 - Benchmarking (90 days): Penske would conduct a comprehensive study of GMM’s inbound transportation operations, including processes, infrastructure and personnel

Phase 2 - Process Design and Engineering (90 days): New procedures would be developed based on inefficiencies and benchmarks discovered in Phase 1

Phase 3 - Implementation (180 days): Penske would implement these new procedures, ensuring full ramp-up in all three plants

During Phase 1, Penske closely studied every aspect of GMM’s inbound transportation operations. From carrier negotiation to routing, each individual activity within the plants was process-mapped to identify inefficiencies.
The conclusion was two-fold. Penske determined GMM lacked overall supply chain visibility, as well as quality control measures. GMM could not accurately forecast inventory needs at plants or monitor carrier progress. Carriers lacked an efficient way to communicate the status of inbound shipments to plant operators. Plant operators were spending valuable time tediously tracking carrier status. Furthermore, there was no way to effectively identify low performers within the supply chain and hold them accountable.

With the benchmarking phase complete, Penske outlined its plan for operational improvement. Penske would implement its proprietary Logistics Management System (LMS) software to track supply chain activity. Concurrent to the implementation of its LMS software, Penske would implement new quality control processes at each step in the supply chain to achieve supply chain visibility and accountability. Penske would maximize GMM’s trained labor force by hiring or transitioning the company’s current personnel to help implement many of the new processes and systems.

During implementation, Penske hired and assigned approximately 120 staff to man GMM’s improved inbound transportation operations. GMM’s existing material follow-up personnel represented nearly 80 percent of this staff, thus avoiding displacement of GMM’s labor force.

The implementation of Penske’s technology and new inbound transportation processes delivered GMM a return on investment almost immediately. Within six months, transportation costs were down by an astounding 15 percent.

Supply Chain Accountability and Visibility Exceeds Expectations
The results of Penske’s three-phase plan exceeded GMM’s expectations. Penske substantially reduced GMM’s transportation costs, decreased its inventory and premium freight costs, and virtually eliminated assembly line shutdowns. In addition, the delivery of damage-free parts increased by 20 percent.

The implementation and deployment of Penske’s LMS software undoubtedly played the biggest role in improving GMM’s inbound transportation efficiency. Using this software, Penske’s system operators can provide carriers precise routing and scheduling information on a daily basis, while tracking exact part numbers and pick-up quantities. The LMS software was also the catalyst for new transportation processes that increase overall carrier accountability. Upon completion of each task, drivers are required to call their dispatchers, who then log the completed activity into the LMS Web site.

For the first time, Penske operators had instant access to real-time updates from every aspect of the supply chain. Penske’s LMS software proactively alerts operators of any carrier delays, reducing the amount of follow-up time previously expended by operators. In turn, operators are able to evaluate alternatives, such as engaging another carrier or expediting freight, to ensure service windows are met using the most cost-effective methods.

Penske also provided GMM with the ability to track, measure and rate the performance of all parties involved in the supply chain. With greater visibility of all inbound transportation operations, supply chain errors/glitches are easily identified and handled.

Every aspect of supplier and carrier performance is tracked on a scorecard, allowing Penske to filter out parties performing at sub-standard levels. Within the first year of implementation, Penske reduced GMM’s carrier base from 100 carriers to 20. This level of accountability has dramatically improved supplier and carrier performance. Window times for supplier pickups are currently being met 98 percent of the time, while delivery window times are being met at a rate of 99 percent.

Looking Ahead: The Future of a Successful Relationship
Penske achieved success with GMM through a unique relationship with the company. With a commitment to exceed expectations under budget, Penske puts 10 percent of its management fee at risk, ensuring its dedication to achieving results. This commitment continues to present new opportunities for both GMM and Penske.

Currently, Penske and GMM are considering sharing its transportation infrastructure with other companies in Mexico that have similar product or material flows. This would enable GMM to realize additional revenue and cost savings within its transportation network. Meanwhile, Penske will continue to deliver unprecedented value to GMM’s supply chain operations.

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