

Generating Savings and Enhancing Control of Fulfillment Operations



Robert Bosch Inc. Canada houses more than 55,000 Stock Keeping Units (SKUs) in its 152,000 square foot Mississauga, Ontario warehouse facility, each business day shipping 600-700 orders to destinations coast-to-coast that range from lightweight parcel shipments to full-load tractor-trailer or rail car.

Similar to the size of its orders, shipment contents leaving the Bosch warehouse vary widely and include automotive parts, power tools, and security systems. The customer profile is similarly diverse, according to Distribution Manager Chris Dyer.

"We ship to everyone from the corner garage to major automotive retailers, local hardware stores to national retail home improvement centers," he says. "For example, a warranty shop might need just a couple of screws, but if they need them, their orders merit the same level of attention as does a truckload of table saws going to a national retailer."

"At this time, the Descartes system is doing everything expected of it, but we're not finished yet with maximizing the potential of the Descartes system. We're currently looking at additional modules to make us even more productive."

Chris Dyer, Distribution Manager, Robert Bosch Inc.

Company Profile

Robert Bosch Inc. Canada
Automotive aftermarket parts, power tools and accessories, and security systems

Descartes Solutions

Descartes Order Express™
Descartes Transportation Manager™

About the Client

Robert Bosch Inc. is the Canadian arm of the North American Division of the Robert Bosch Corporation, a Stuttgart, Germany-headquartered international company that employs approximately 250,000 people in more than 50 countries.

Quick Overview

Challenge

Limitations Within a Sophisticated IT Structure

Solution

Linking With Existing Systems for Seamless Operations

Results

- Operational Flexibility
- Error-free Documents
- Cost Saving
- Enhanced Customer Service

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The Challenge: Limitations Within a Sophisticated IT Structure

To deal with its complex distribution matrix of products, carriers and customer preferences, Robert Bosch Inc. has a sophisticated IT structure. A SAP system houses data for Bosch, Skil & Dremel power tools, and an IBM AS/400 system services Bosch Automotive and Bosch Security product lines. Orders download to the warehouse management system (WMS) for fulfillment; parcel-size orders were picked and packed and then rated and routed using a commercial shipping machine. Large orders – the truckloads, less than truckloads (LTLs) and rail car loads – were manually rated and routed, with paperwork being manually generated. “Over time these procedures became unsatisfactory on several levels,” Dyer says. “Software support was unpredictable since it usually came out of the U.S., which could mean slow response times. Information was not readily available to our customer service teams. And, too often, we found ourselves limited to a single carrier for LTL shipments because we did not have an expedient way to source the carrier with the most economical solution. It was apparent that we needed a flexible shipping solution that would accommodate all types of shipments within a single system.”

The Solution: Linking With Existing Systems for Seamless Operations

The Descartes TM solution is a multi-carrier-compliant enterprise logistics solution that provides efficient planning and execution of shipping and warehouse activities at touch-points in the distribution process. Descartes’ TM helps support rules-driven automated routing of Truckload (TL), LTL, small package carrier, multi-modal, fleet and messenger services.

Dyer worked with Descartes personnel to define the transition program, which involved several stages. Together, they established and documented the scope of the project, including a review of the entire logistics processes. They identified the steps that represented the optimum flow of information from the SAP – AS /400 management software, where orders and inventory information were maintained, to the warehouse system, which executed the receiving, inventory management and fulfillment process, and finally to the newly acquired Descartes shipping solution.

The Descartes software was installed on a network server and interfaced with the warehouse management system providing high speed exchange of data between the two systems, virtually in real-time,” Dyer says. “Orders drop from the databases into the WMS and, once they are picked and packed, the data drops automatically into the Descartes software for rating and routing according to the customer’s delivery requirements and cost. Descartes performs these tasks automatically, verifying customer order numbers, shipping details, and choosing the most economical routing, also providing alternatives compatible with customer requirements.” Once the shipments are rated and routed, Descartes generates the shipping labels and carrier bills of lading. All carrier loads are manifested daily. Its electronic data interchange (EDI) module enables it to send advance shipping documentation to EDI-enabled carriers, and retrieve delivery information back on previous shipments that have been delivered by the carrier.

Results:



Operational Flexibility

The Descartes solution provided Bosch with the ability to process shipments of all sizes from one system, a significant reduction in time spent alternating from one process to another.



Error-free Documents

Shipping automation generated major savings of personnel time by automatically creating error-free printed copies of shipping labels and bills of lading.



Cost Savings

Optimized routing of Truckload (TL), LTL, rail and small package carrier means each shipment is priced advantageously or complies to rules established by customer.



Enhanced Customer Service

Connected systems means information is readily available to customer service teams, enabling those teams to respond in real time to customers inquiries.