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## NorthGate Reverse Logistics Automotive Parts Returns



**NorthGate provides complete reverse-logistics services. This *White Paper* chronicles our solutions for a large client with complex Returns Management needs.**

### OVERVIEW

In 2002, NorthGate (known at that time as Security Packaging) was approached by our largest customer and asked to handle product returns (reverse logistics) for a group of service parts. These parts were shipped to over 4300 dealers and retailers directly from the source of the part, as opposed to their normal parts distribution system. When one of these “ship direct parts” had to be returned, it was simply too much to ask of these dealers/retailers to return them to their original source, of which there are several thousand. So, we established a centralized parts recovery center to manage this complex function. It started with a couple hundred parts a day and a few product sorts, and has expanded to the point where we now manage thousands of individual returns per day, with over 40 possible actions for each part received. This has allowed them to salvage millions of dollars in assets.

## CENTRALIZED PARTS RECOVERY

Parts are returned for many reasons, and managing a reverse logistics operations is a key, and often complex, business function. Speed, efficiency, and cost-control are critical to satisfying customer demands. Centralizing this function reduces business risks, saves time, and preserves marginal revenue.

### **NorthGate manages a fully functional, centralized Parts Recovery Center that provides the following services:**

- Receive parts against Material Return (MR) applications
- Close customer MR applications and issue credits that are reconciled with Advanced Shipment Notification (ASN) files
- Scrap parts upon receipt and periodically from service inventory
- Warehouse parts
- Inspect, rework and repackage parts as needed
- Pick and ship parts to customers, suppliers and other third party service providers
- Validate claims (such as *unitized incorrectly*, *concealed damage*, and *new defective*) and investigate Problem Report and Resolution (PRR) requests
- Manage inventory, provide inventory reports and perform audit cycle counts
- Manage a flexible, rule-based receiving and disposition system
- Inspect and repackage products returned in damaged packaging
- Salvage parts with residual value
- Process all documentation required for Hazardous Materials in accordance with U.S. Department of Transportation regulations.
- Process part number change requests by relabeling and updating inventory to allow for resale
- Annual physical inventory
- Identify “lost” parts that were returned undeliverable
- Receive inbound parts from suppliers, de-unitize, and repack

## TYPES OF RETURNS

NorthGate handles a wide range of products for our customer, including automotive accessories, chemicals, nickel-metal hydride (NiMH) batteries, packaged and bulk unpackaged parts, packaged sheet metal parts, headlights, bumpers, axles, and small items such as switches, and fasteners.

## WAREHOUSE MANAGEMENT SYSTEM

NorthGate provides a state-of-the-art Warehouse Management System (WMS), software and other systems, and dedicated professionals.

### **Powerful Functionality**

Our WMS software manages the complexity of part returns. It defines and assigns stocking and setup locations by area, zone, and commodity code. It will define single- and multiple-item locations and freeze stock in a location. In spite of the fact that we have hundreds of thousands of potential sku's, and tens of thousands of parts in our warehouse at any one time, we know the location of every item under control at all times.

WMS uses rule-based processing to define picking paths and zones by order type, size of order, bundled orders, customer and order groupings, and other defined rules. With such flexible and detailed capabilities, packing and shipping efficiencies increase. It all adds up to increased speed, more efficient throughput, compact use of space, and reduced costs.

The NorthGate Warehouse Management System software interacts directly with the customer's systems to exchange data using industry standard file formats. We receive dealer orders, update inventory, post order status, and send Advanced Shipment Notifications (ASN's).

WMS relies upon an extensive part-attribute file—nearly 1 million part numbers with many attributes per part—used in combination with custom processing rules to sort and process parts upon arrival at the warehouse.

Radio frequency (RF) and bar code scanning provide complete processing and location management throughout the warehouse.

We provide dedicated IT project management to optimize real-time system operations and control. Complete system redundancy and data backup ensure 100% availability.

## **OPERATIONS**

Operations include various, and often complex, processes that must be managed end to end in a timely manner. In a Centralized Parts Recovery warehouse, common operations include the following:

### **Inbound Freight**

We verify all received freight against the bill of lading and report any discrepancies (e.g., counts do not match, seals incorrect or missing, paperwork missing).

### **Incoming Material Returns**

There are many reasons that parts are returned to us which presents a difficult challenge for many of our warehouse operations. The Northgate WMS provides complete management for returned materials.

We can:

- Receive, stage, and store service parts
- Validate the return against the Advanced Shipment Notification
- Inspect the part for transportation damage
- Confirm that the shipment is complete, and verify that the proper documentation accompanies the shipment
- Confirm the part numbers and quantities shown on the shipping documents
- Update inventory files to include information on the received quantities and any discrepancies, in real-time
- Close the Material Return application and approve credit for the customer

### **Material Claims Processing**

Every Problem Report and Resolution request gets the same 100% inspection. Types of claims include *damaged or defective material, shorted quantities, incorrect part numbers, and non-compliant packaging.*

### **Repackaging, Rework and Labeling**

We repackage serviceable products that arrive in damaged packaging. Our repackaging process includes: Stocking many styles and sizes of corrugated containers, internal dunnage (void-fill), labeling, bar coding, heat sealing in poly bags, stapling, stretch wrapping, and pallet handling.

### **Scrapping**

We evaluate parts to be scrapped to determine any residual value.

### **Outbound Shipments to Customers**

We pull orders, hourly, from our customer's order-writing system. Based on the order, we pick, package for shipment, and communicate the order status to the customer. Many orders are received, processed and shipped on the same day.

### **Outbound Freight**

All outbound containers are bar-coded for efficient handling and tracking. We coordinate logistics, transportation, and delivery of parts to customers. When necessary, we affix "country of origin" labels and ensure compliance with all relevant U.S., Canadian, NAFTA, and international regulations.

### **Typical destinations include:**

- US and Canada customers
- US and Canada distribution centers
- International customers
- Original Equipment Manufacturers
- Core remanufacturing facilities
- Recycling and scrap facilities
- Hazardous disposal facilities

## **Hazardous Materials**

NorthGate employees are trained for hazardous material handling, and we abide by federal regulations that govern the shipping, packaging, and storing of hazardous materials.

## **Quality Assurance**

NorthGate exceeds all performance measurements regarding customer claims of incorrect part, incorrect quantity, unitized incorrectly, concealed damage, and timeliness of shipments.

We audit every process including trailer receiving, product receiving, scrap handling, shipping, repackaging, MR quality claims and PRR processes, inventory cycle counts, and security. We audit and conduct performance reviews and prepare monthly reports to ensure processes and documentation are accurate and efficient.

## **FACILITY**

NorthGate is ideally located in mid-Michigan and distributes service parts in the United States, Canada, and internationally.

### **Security**

We protect our customer's goods in our building with a robust, multi-faceted security system that includes alarm contacts on all doors, windows, dock doors, and vents, interior and exterior closed-circuit cameras, and an automatic dial-up to the security-monitoring company for response to any intrusion detection or alarms.

Our fenced trailer yards stores up to 175 trailers.

### **Racking and Storage Systems**

Our warehouse is racked so that space is maximized. It allows for the efficient storage and retrieval of very small parts to extremely large parts.

### **Equipment**

We have a complete line of material handling equipment needed to lift, move, store, pick, and pack customer orders safely and efficiently. Staff routinely up-date and expand their specialized material handling skills.

## **CONCLUSION**

NorthGate provides sophisticated, efficient, and cost-effective reverse logistics for large and complex applications. Our employees, systems, facilities, and processes combine to create a state-of-the-art automotive parts recovery center.

We achieve superior customer satisfaction using a combination of technology, facilities, equipment, expertise, processes, and internal quality assurance practices. Our commitment to the job ensures rapid processing, correct actions, cost-savings, and timely reporting every time.