

# PSC Enterprise Solutions Case Study



## Parts Management Initiative Drives \$250,000 in Savings and Much More

### **The Problem – Parts Shortages Leading to Downtime, Excess Operating Costs**

An international heavy equipment manufacturer was having problems managing parts. Inventory misplacements and parts shortages were resulting in either production downtime and/or excessive air freight costs for 'rush deliveries' of parts to meet manufacturing schedules. New capabilities were required to better manage parts inventories. The solution needed to be designed, developed, and installed within the eight week timeframe to align with their semi-annual plant shutdown.

### **The Analysis – Identifying Improvement Opportunities**

PSC resources worked with the client team to review and document the current parts management and receiving operations. After a thorough analysis of the current operations, specific opportunities were identified, including:

- **Receiving:** Current receiving processes did not effectively manage and track parts, especially those from their overseas parent.
- **Inventory Accuracy:** Chronic parts shortages forced frequent use of air freight to bring in parts that were in short supply. At the end of each production day, physical inventories resulted in numerous revisions to inventory levels.

The Client required a solution to more effectively track all materials entering and leaving the import parts warehouse.

### **The Solution – Process Improvements with Enabling Automation**

After identifying and evaluating alternative approaches, the team developed the recommended solution to re-engineer how each order was processed from receipt into inventory. Key solution elements included:

- Use of Advanced Ship Notices (ASN) & bar code technology to preload the expected inventory detail. On opening the container, confirmation of receipt by scanning the bar code for each order.
- Put-away functionality to track the order to the inventory location utilizing barcode scanners, as well as any subsequent movement of the parts between locations.
- Picking was performed by scanning a Kanban card and the order, with the system matching the two to ensure picking accuracy.
- Cycle counting process was developed to allow a regular review and true correction of actual inventory levels.
- All transactions were recorded in real time.

The system was designed to be of minimal impact on the people unloading, putting away, and picking the materials while still tracking exactly what was in stock and where in the warehouse it was stored.

### **The Value – Improved Productivity, and \$250,000 in Reduced Freight Costs**

As a result of this project, inventory accuracy increased dramatically and part inquiries showed actual quantities available at any instant. Tangible benefits included:

- Reduced production downtime from parts shortages,
- A \$250,000 annual savings in air freight charges,
- Quicker physical inventory processing, which were eventually replaced by cycle counts; and much smaller adjustments to inventory based on more accurate data on actual stocking levels,
- Improved parts delivery accuracy – with an immediate reduction of incorrect part deliveries to the production line from an average of 20 per day to zero.

#### **The Benefits**

- Reduced production downtime
- \$250,000 in annual air freight savings
- Lower stocking levels
- Elimination of wrong part deliveries

#### **The Technology**

- System i
- Conveyor and barcode scanning systems
- Kanban



PSC Group, LLC is a professional services firm that specializes in business process architecture and back-end integration. We have extensive experience and expertise in architectural design and Business Performance Management, Dashboards, and Reporting.

When it comes to information management and control of business processes, PSC can provide you with a competitive advantage through the smart application of technology.

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