Customer Service/Delivery Performance Turnaround At Leading Industrial Hardgoods Manufacturer: New Planning/Delivery Capabilities

The Challenge: Our client, a leading manufacturer of industrial hardgoods and accessories was experiencing difficulties shipping product on-time to customers as evidenced by a \$10MM backlog in orders and a 15-day order-to-ship cycle time. MachiningCo brought us in to assist in solving their delivery issues.

The Partnership:

<u>Analysis</u>: Our team quickly performed a diagnostic, quickly uncovering the root causes of the delivery/service break-down:

- Inventory cuts made to fulfill a corporate initiative had focused on the wrong inventory (fast-moving, rather than slow-moving/obsolete SKU inventories had been cut), resulting in depleted finished goods and componentry for the client's core product line
- A legacy, pull-based planning system provided little visibility to inventory and work-in-process. Furthermore, system parameters were out of date (e.g., pull signals and economic order quantities).
- An uptick in demand had created capacity constraints within the manufacturing processes, exacerbated by long changeovers necessitated by out-of-date machining equipment.
- Client personnel operated in a "firefighting", reactive planning mode evidenced by lack of prioritization of work orders on the shop floor.

<u>Strategy</u>: With its highly complex product lines (9,000+ saleable SKUs with BOMs 6 levels deep), a focused and disciplined approach to manufacturing planning was required to address the root causes of the delivery/service breakdown. Our recommended planning/delivery approach comprised the following key elements:

- Establishing a short-term, tactical prioritization for getting product out of the door
- Correcting planning system parameters
- · Creating a delivery strategy focused on customer needs
- · Establishing a shop-floor prioritization mechanism taking into account capability constraints
- Implementing planning reports and key performance indicators (KPIs) to broaden and elevate planning and production visibility
- · Migrating to an integrated MRP system in the longer term.

<u>Execution</u>: *Delivery Issues*: We assisted the client management in establishing a "fast-ship" program that focused the organization on righting delivery cycles for the highest volume products. The fast-ship program was pilot tested with 80 SKUs representing 50% of sales volume.

Planning: We created a customer-focused product classification based on sales order variability, frequency, profitability, and complementary order pattern, and we updated system parameters, including safety stock, lead time and EOQ, to improve the planning process.

Scheduling: We helped management create a simple, 8-week fixed shop-floor schedule to ensure the availability of high-volume SKUs. In addition, we created a work order prioritization system to ensure the "highest need" parts were produced first.

KPIs: We implemented planning/customer service KPI reports for performance visibility and tracking.

The Results: The fast-ship SKU program reduced order-to-delivery cycle to 1 day from over 2 weeks–with the success of the "fast-ship" pilot test, the program was eventually rolled out to some 280 SKUs, representing 80% of sales. The \$10MM manufacturing backlog was reduced to \$2.5MM (including future orders) within 3 months.

