REDUCING THE COST OF MAINTENANCE REPAIR AND OPERATING (MRO) SUPPLIES AND KEEPING MANUFACTURING RUNNING FOR A LEADING PETROCHEMICAL COMPANY.

No one knows the value of time better than the maintenance and engineering people in the petrochemical industry. Because their plants are continuous-process operations, maximizing equipment uptime and preventing production interruptions is paramount to profitability.

One industry leader, in particular, was looking to streamline maintenance, repair and operating (MRO) supply across the company and effectively manage 200,000 transactions annually throughout 12 large plants in three Gulf Coast regions. With its fixed-asset investment and high changeover costs, continuous plant performance was imperative.

THE CHALLENGE

The challenge was reducing the complexity of MRO supply without jeopardizing product availability and keeping critical equipment safe and running.

With plant space at a premium and inventory carrying costs high, only critical MRO items could be kept on-site. All others would have to arrive just in time. This was particularly challenging because MRO volumes are highly variable, and managing them during periods of high activity — especially turnarounds — is no easy task.

Among the other items critical to the success of the MRO supply solution were reducing in-plant traffic and congestion, improving maintenance and engineering labor productivity, ensuring order visibility, improving the reliability of delivery services and expediting payment to suppliers.

The solution offered by Exel, North American sister organization of DHL Supply Chain, had to be resourceful, integrated and seamless. And with MRO materials coming from a broad spectrum of large- and low-volume suppliers, it had to be flexible, too.

Challenge
Reduce cost and the complexity of MRO supplies while ensuring availability of needed items
Reduce inventory by keeping on-site only critical MRO items
Improve the reliability of delivery services

Solution
Strategic and centralized approach to MRO supplies with:
- Efficient and reliable systems and processes
- Order consolidation
- Dedicated fleet for pick up and delivery
- In-plant economies

Benefits Summary
- Total cost control
- Expedited transportation cost
- On-site carrying inventory
- Safety and security with qualified partners on site
THE SOLUTION

"After close consultation with the customer and a strategic analysis by our integrated logistics design team, Exel designed and developed a unique solution to streamline MRO product flow, minimize on-site inventory and reduce transportation costs," said Joe Derajtys, director of product development for Exel.

The first step was putting a system in place that linked the order-entry process with MRO supply locations, creating a clear and visible chain of custody across the supply chain.

Exel next established "vendor sweeps" twice per day during which MRO supplies could be picked up from 25 different large-volume suppliers using the appropriate vehicle type for the supplies needed. Plant deliveries were also scheduled to maximize on-time distribution and MRO supplies returns, and a new demand-response service managed emergency part deliveries.

Exel also established three off-site cross docks as integration points for both large and small-volume suppliers, so orders could be consolidated and deliveries reduced.

To make processes even more efficient, Exel:

• Implemented emergency order planning and transportation management systems with 24/7 service on all "hot shot" orders

• Consolidated expedited transportation vendors with negotiated rates and service levels

• Created open-bin deliveries and in-plant put away services and moved receiving and materials inspection off-site

• Gave premium parcel packages time-sensitive identification, sorting and delivery

THE RESULTS

The most important thing Exel’s improvements provided this client was a framework for sustainable performance. Whether by consolidating pick-ups and deliveries through a single source or streamlining in- and out-of-plant processes, the results were the same – immediate and repeatable efficiencies.

The client went from:

• Guessing at their total MRO costs to understanding item and logistics costs

• Extra in-plant personnel to qualified on-site partners

• Inconsistent product information to end-to-end visibility

• More-than-enough inventory to just-what-they-need inventory

And thanks to an Exel-devised metric tracking system, the customer was able to monitor performance on a weekly basis in the areas of safety, productivity and efficiency, as well as key conformance statistics like shipping accuracy and on-time shipping and receiving.

“Our vision was to bring the benefits of logistics outsourcing to the MRO space. For this petrochemical client, benefits include supply chain visibility and cost control, as well as Exel’s expertise in warehousing and distribution, so they have more time to focus on core activities,” said Mark Johnson, vice president of business development, Chemical - Energy business unit.

Where are you on this chart?

MRO Cost Reductions for the past 3 years

<table>
<thead>
<tr>
<th>Class</th>
<th>Laggard</th>
<th>Average</th>
<th>Best in Class</th>
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<tbody>
<tr>
<td>Supply Base</td>
<td>18%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Inventory</td>
<td>14%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Administration</td>
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<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2%</td>
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</tbody>
</table>

Source: Aberdeen Research

Taking control of MRO supplies keeps critical equipment safe and running and prevents interruptions and lost profits. Contact us to discuss a partnership that streamlines your MRO supply management.

For further information:

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