MRO Supply Chain Challenges





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AS A GLOBAL MANUFACTURER of the nylon, plastics, and synthetic fibers that are found in thousands of different commercial and industrial products, Ascend Performance Materials touches everything from carpeting to tires, apparel to agricultural products, and animal feed to personal care products.

Ascend's world scale manufacturing facilities are fully integrated, meaning they have complete ownership of the technology used to make Nylon 6-6. This gives Ascend the flexibility to react quickly to its customers' evolving needs.

Intent on always being a "reliable supplier" for those customers, Ascend completed an internal assessment of its indirect supply chain needs in 2009 and realized that it required a better way not only to manage its maintenance, repair, and operations (MRO) procurement and the costs associated with it, but also to align its MRO supply chain with its overall production reliability strategy.

Over the next few pages, we'll explore Ascend's journey into MRO supply chain management, highlight the challenges the company was dealing with in 2009, and then show how it's effectively managing its MRO supply chain for more reliable production and overall equipment effectiveness.

The journey to process excellence

From his vantage point as director of global indirect procurement for Ascend, Tom Barrett has a pretty clear view of the manufacturer's purchasing activities. Barrett is a progressive visionary - although he may not describe himself that way. As someone who has never settled for the status quo, Tom Barrett certainly tends to push the envelope leading to breakthrough ideas that really add value for Ascend.

One of the largest components of its indirect supply, Ascend's MRO purchases also includes capital equipment, construction supplies, waste removal, and a "fairly large basket of other items," says Barrett. Six years ago, Ascend added five new plants under its corporate umbrella - each of which was managed by a mix of internal and external staff members, and not all operating from the same playbook when it came to the MRO supply chain. In some cases, plant procurement professionals handled the process. In others, the task was supported by outside vendors. These are not small plants. They are 1000+ acre petrochemical sites where consistency and control, especially in health, safety and environment are critical.

"Each plant did things in a little different way," says Barrett. There was no standardization. Ascend didn't have the ability to aggregate and leverage its spend across the enterprise. The indirect supply chain was not aligned with Ascend's corporate goals of production reliability. "When we realized that, we embarked on a 'journey to sustainability and excellence in process and control.""

As part of that initiative, Ascend first looked at its total spend for indirect materials. Some of the key points that it evaluated included the aggregation of that total spend across various plants, how to improve the procurement departments' efficiencies, and the identification of potential areas of continuous improvement. The latter was particularly important, according to Barrett, who says, "You can't just expect to keep going back to the same suppliers and get the same parts savings."



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It was clear to Barrett that Ascend had to look externally to meet these goals. Ascend simply didn't have the resources and expertise in the MRO category or the MRO-specific technology to deliver any real immediate or long-term value. They needed to drive change

"We looked at areas where maintenance operations or other departments were making parts substitutions or not using alternative suppliers in the marketplace." across their enterprise, and they needed a partner to help them get there quickly.

Working with SDI, a supply chain management firm that focuses solely on MRO, and its own inhouse engineering talent, Ascend began strategizing with each of its plants to ferret out key areas that were in need of improvement.

"We looked at areas where maintenance operations or other departments were making parts substitutions or not using alternative suppliers in the marketplace," says Barrett, "and then used the information to broaden our scope of influence via an outsourced MRO environment."

But Barrett knew he couldn't look at this from a traditional procurement outsourcing perspective. This wasn't MRO just for the sake of MRO. Traditional methods could potentially deliver savings in the short term, but he recognized that driving down the price, via parts savings, wasn't going to get Ascend the sustainable, long-term value they were looking for. This initiative also had to align with and support their goals of production reliability and enterprise-wide control.

Championing change

For over 40 years, SDI has provided MRO supply chain management services - a complete endto-end platform from procurement to storeroom management to the technology to support it and everything in between - to make MRO a more strategic part of their clients' businesses, adding value and delivering results. The company's programs support enhanced productivity for companies in the manufacturing, automotive, travel, food & beverage, healthcare, aerospace, and telecommunications fields. It's truly an MRO ecosystem that is dynamic and evolving, creating value through a productive collaboration among their in-house experts, clients, distributors, labor and technology.

Before selecting the SDI platform, Ascend shopped around and looked at various options available on the market at the time. They weren't just looking for labor arbitrage or parts savings, but at brokering new capabilities - Barrett's goal was to bring new capabilities into the organization. Using a formal request for proposal (RFP) process, the manufacturer set out to find a platform - an infrastructure that could standardize their MRO/indirect supply chain, and manage it to the degree that it would enable each Ascend function within that end-to-end process to gain value as well as the enterprise on a whole.

After narrowing down its options, Ascend "selected the platform that presented the greatest value proposition (with MRO-designed technology, standardization and transparency, technical expertise and experience, a holistic solution and a complete change management/ transition process) for the amount of change that we wanted to support," says Barrett, whose team was particularly interested in working with a partner that would help Ascend improve its operational standards and achieve its innovation and continuous improvement goals.

Acknowledging the fact that new process and technology implementations as well as change management can be challenging, particularly when they impact established operating procedures, Barrett involved numerous departments and managers in the project.



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"My theory is always that you can't do enough training and you can't communicate enough on these types of implementations," says Barrett. It was important that all stakeholders understood the need for change, had a voice and felt a sense of ownership in the proposed program,

in order for it to be successfully adopted across the enterprise.

"Our plants run 24/7, 365 days a year, so the implementation process had to be seamless, from both the installation and the support perspective."

One concern that was voiced came from the Ascend technology team. The integration of the new MRO platform had to take Ascend's existing SAP program into consideration, he

says, noting that the manufacturer wanted to be able to maintain its systems' data integrity and master material information (i.e., product identifications, nomenclature, and so forth) as part of the process. An integral part of SDI's solution is direct integration with their clients' existing ERP systems through their SDiConnect app. SDiConnect provides a cloudbased connection to Ascend's SAP system, with no customizations required.

"Our plants run 24/7, 365 days a year," Barrett points out, "so the implementation process had to be seamless, from both the installation and the support perspective. So that's what we focused on."

Path to continuous improvement

As part of the effort to improve control through transparency in their MRO processes, Ascend's MRO overhaul included aggregating spend to better leverage the opportunities in the marketplace.

Leveraging the SDI platform, the company has been able to consolidate numerous individual suppliers down to a single buying firm (SDI), improve and consolidate its payment terms, and improve its overall cash flow. When Ascend needs janitorial supplies, filters, or valves, for example, it uses SDI to select the best vendor and procure the goods or services.

As part of its MRO supply chain management process, Ascend is also using SDI's predictive modeling capabilities for demand management. The company also plans to integrate SDI's industrial vending offering. Through their premier partnership with AutoCrib, SDI's platform includes point-of-use vending and RFID-enabled tool cribs to further improve efficiency by increasing access to parts on the plant floor and where they're used the most, while maintaining stringent controls.

Prior to working with SDI, there was a lack of confidence in the storeroom's ability to provide the necessary parts to keep the production lines running. With SDI and the fully integrated point-of-use vending systems that support their solution, "We no longer have parts squirreled away in different corners of the plant, going unused," says Barrett, who foresees a time in the near future when Ascend adds fullyintegrated industrial vending units into its plants.

Using SDI's platform, Ascend is also using inventory site recapture programs that allow the company to more efficiently "share" MRO materials across its various plants. This helps the company avoid procurement duplication and ensures that the right tools or parts are in the right place and at a right time. "This feature is particularly useful when we're dealing with plant turnarounds or outages," says Barrett.

Since implementing SDI, Ascend has also added "kitting" functions to its operations. When a pump or valve is in need of repair, for example, numerous parts, filters, and other items must be ordered, kitted, and shrink-wrapped in advance of the actual repair. "We can have SDI deliver the pallets right to the site," says Barrett, "thus cutting down on the time and effort needed to get the right parts to the point of repair."



WHITE PAPER

DRIVING CHANGE MANAGEMENT:

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MRO for a more connected enterprise

About SDI

By helping organizations understand how each link in their MRO supply chain impacts the entire enterprise, SDI helps them achieve yearover-year savings, enterprise-wide efficiencies and newfound control.

Using a custom suite of products, services and tools, SDI's platform coordinates, aligns and optimizes every step of the MRO indirect process.

Lower costs, smarter inventories and increased performance are all natural results from a more connected MRO supply chain.

To learn more visit sdi.com today.



MRO: Not Just a Necessary Evil

For many organizations, MRO tends to be viewed as a necessary evil that doesn't always receive the time, attention, or budget required to make it function like a well-oiled machine. Traditionally, managing MRO meant focusing on controlling spend through simple pointsolution providers - distributors or service providers that are focused on a particular symptom rather than treating the root cause of the problem.

This path of managing MRO may have delivered short-term piece-price savings, but ignored the underlying issue—MRO is core to what manufacturers do. It's about more than the runaway MRO spend, obsolete inventories, rising administrative costs and the costly warehouses to store unproductive assets. It's about enabling reliable manufacturing processes by reducing plant downtime and increasing operation productivity and overall equipment effectiveness.

Thanks to the change management lead by Tom Barrett, Ascend has shifted the way MRO is viewed in their organization by managing this indirect supply chain in the same manner as they'd manage their direct supply chain - and have realized considerable value in the process.

As just one example of these benefits, Ascend has been able to effectively hone its Approved Manufacturers List (AML) at each of its sites. This singular effort has created a much more uniform approach to where Ascend's procurement professionals order parts from through SDI. "This was a big improvement, in and of itself," says Barrett. In addition, Ascend has been able to achieve new levels of data integrity that - as a company with five plants working on different axes of the MRO plane - have helped it better maintain and integrate its buying activities and the associated spend. "When you have a lot of integration within your systems, and when you get into using more sophisticated automation," Barrett explains, "your data improves."

Going forward, Barrett says that Ascend plans to leverage its MRO supply chain management platform even further by digging down into the company's critical spares, which are defined as those parts that could present problems if they aren't immediately available—knowing that it's not possible to keep an entire extra "plant" of spares in the storeroom.

Barrett, who is also looking forward to further integrating industrial vending functionality into Ascend's indirect spend activities, sees improved data control, better visibility over spend, and a more efficient approach to storeroom inventory and availability in the company's future.

Understanding how one piece of the MRO picture impacts the enterprise-wide big picture has lead to long-term savings, end-to-end efficiencies and improved control. By focusing on MRO as a core enabler to their business, Tom Barrett has moved the needle to transform Ascend's production facilities into something more predictable and reliable.

"The average part within MRO is probably less than \$300, so there are a lot of small transactions that can really add up," says Barrett. "Plus, if the critical valve, belt, or gasket isn't there when you need it that can really impact your operational success."