MRO Supply Chain Solution

Aligning operations with business strategy to deliver Operational Excellence

IHS is the Leading Source of Software, Content and Expertise to Achieve Operational Excellence and Manage Risk Through Optimal MRO Supply Chain Performance.

Consider the facts!

Industry studies show, MRO inventories are growing at 9% per year, even though 55% of MRO inventories have not moved in the past three years - and 30% of MRO inventories that are currently in stock will never be used. Furthermore, 6% of MRO items make up 90% of the annual spend for the average company, but the majority of reorder points and reorder quantities are incorrect.

What if you could?

- Remove Inconsistency
- Reduce Complexity
- Improve Execution
- Increase Visibility

As companies mature, become more sophisticated and seek to streamline their operations and maximize their return on investments made in enterprise resource planning (ERP) or enterprise asset management (EAM) system, there has been a renewed interest in improving the quality of their maintenance, repair and operations (MRO) data and the overall performance of the MRO supply chain.

Asset-intensive organizations have multiple plants and house data on hundreds of thousands of MRO parts that often times are: unidentifiable, duplicate and have non-compatible item descriptions. The lack of effective, commercially available solutions and poor management of MRO parts pose a significant challenge for these organizations.

As a pioneer in MRO information management, IHS offers proven methodologies, software, content and expertise for achieving MRO Supply Chain Excellence.

For over 35 years, IHS has helped the world’s largest, most-complex asset-intensive organizations align their operations to business strategy through standardization, governance, and optimization of MRO supply chains to:

- Reduce Cost & Inefficiency
- Foster Continuous Improvement
- Enable Operational Excellence
- Manage Operational Risk
- Drive Sustainable Growth
Unlock the Full Value of Your ERP/EAM System

Enabling Operational Excellence

Operational Excellence is the pursuit of operational execution that is attained as the principles, systems and tools throughout an organization are aligned to deliver sustainable improvement of key business objectives. The MRO supply chain has always been essential to drive organizational efficiency, capacity, and cash flow. Asset heavy companies are now recognizing MRO as a strategic enabler of Operational Excellence.

By optimizing the flow of MRO supply to deliver the right part, in the right quantity, at the right time, to the right specifications, for the right price, companies are able to drive strategic initiatives that enable operational excellence programs.

The inability to streamline the MRO supply chain can have serious consequences. The ramifications from MRO supply chain failures can range from costly equipment shutdowns or loss of business to less-likely but potentially catastrophic situations such as fatalities, asset damages, environmental destruction, or reputation damage.

In order to meet your objectives, you must plan for, and manage risk, make workflows and business processes more efficient and effective, and make sustainability an integral part of your business operations. To gain full visibility into your operations and the underlying systems, processes, and data underpinning performance, our experts suggest using a bottom-up approach.

Not only are IHS software, content, and expertise specialized to the very unique needs of MRO, but our inherent best practices, knowledgebases, and insight have successfully proven to address the industry-specific needs of large, complex organizations.

What makes IHS unique is our combined solution which was designed to:

- **Transform MRO data into actionable information**
- **Adopt a governance strategy**
- **Align workflows with cross-functional stakeholders**
- **Institutionalize enterprise-wide best practices**

IHS offers software, content and expertise to enable stakeholder collaboration for managing the MRO Supply Chain across Maintenance, Engineering, Operations and Procurement.

<table>
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<tr>
<th>Supplier &amp; Contractor Management</th>
<th>Quality Assurance</th>
<th>Operational Risk</th>
<th>Asset Performance</th>
<th>Procurement Effectiveness</th>
<th>Process Safety</th>
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<td>Understand suppliers’ cost structures, negotiate prices effectively and strategically time purchases while improving supplier relationships</td>
<td>Deliver high-quality, reliable products faster and at less cost than your competition while avoiding potential business disruptions</td>
<td>Proactively identify, assess, manage and mitigate risks throughout your enterprise</td>
<td>Sustain physical assets to increase capacity, performance, organizational efficiency and cash flow</td>
<td>Foster productive and innovative supply management while reducing cost and controlling risk</td>
<td>Streamline regulatory reporting and improve your company’s safety performance</td>
<td>Simplify compliance and reduce risk while enhancing accountability, efficiency and competitiveness</td>
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Faster More Confident Decisions

Unified MRO systems, data, and personnel are critical in driving Operational Excellence.

The IHS Standard Modifier Dictionary™ is the most widely used methodology for characterizing MRO master data. The data model was developed from the beginning with the understanding that MRO is a domain distinctive from other supply chains and associated business processes. MRO master data requires a specialized nomenclature to ensure that naming protocols are consistent across the enterprise.

Used daily by more than 3,000 industrial facilities in 35 countries and in 14 languages, the SMD is a highly respected classification schema that offers optimized templates and consistent and repeatable rules designed specifically for characterizing MRO inventory.

IHS Struxure™ is best-in-class data governance software for sustaining your MRO master data optimization efforts long-term. Struxure enforces the rules and best practices necessary for creating and maintaining standardized and comprehensive MRO item descriptions. Struxure and SMD seamlessly integrate into enterprise resource planning (ERP) and enterprise asset management (EAM) systems and dynamically synchronize your MRO data. This integration allows you to take advantage of our advanced capabilities, not available in your standard ERP or EAM system.

Struxure and SMD ensure improved consistency, visibility and execution, on the enterprise level no matter the level of operational complexity by streamlining cross-functional workflows and ultimately optimizing the MRO supply chain.

IHS is a pioneer of the globally recognized methodology that is embedded into our materials data dictionary and best-in-class software. Our experts have over three decades of experience in executing global, large-scale, integrated MRO deployments to leading asset-intensive companies. They have optimized over 70M+ MRO items for over 100 customers and more than 1,000 users. We serve multiple asset-intensive industries - oil & gas, chemical, utilities, manufacturing, etc.

IHS customers look to us to streamline their MRO supply management and extract the maximum value from their asset base. Our experts help you develop and implement MRO best practices, but more importantly, we help ensure that our customers maintain a holistic view and continuously underpin those MRO elements to the overall Operational Excellence program performance.

IHS Expertise is Unparalleled
Part of a Complete Strategy for Enabling Operational Excellence

Join the many organizations that are successfully using a unified Operational Excellence (OE) strategy to increase the value of their businesses by integrating principles of sustainable growth into all aspects of product design and materials planning, manufacturing and operations, resource consumption and daily work processes. See how other complementary IHS solutions can help you manage multiple challenges and enable elements of your OE program including asset performance, procurement effectiveness, operational risk, process safety, quality assurance and environmental performance.

WHY IHS?

Industry Leaders Choose Us Because We Get Results

For decades, our team of experts has provided software, content and expertise to thousands of industry leaders around the world – helping them achieve their business goals and enabling Operational Excellence. Read about results achieved by organizations at: www.ihs.com/mro

IHS MRO Supply Chain Solution

For more information please visit www.ihs.com/MRO or e-mail MROInsights@ihs.com