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In a complex manufacturing operation, commodity lubricants bought from multiple suppliers are easy to take for granted. But this approach can compromise productivity and profitability. The consolidation of lubricant purchasing with the right supplier can help manage and enhance this important maintenance function. However, the selected vendor must offer a complete solution in the form of a full line of lubricants and fluids backed by local distribution and technical support.

Maintenance professionals interested in tapping lubrication consolidation for savings opportunities may find it helpful to think about the following questions when evaluating potential suppliers:

How complete is the supplier's product line?
The suppliers best equipped to meet requirements for diverse lubricating solutions are those offering a complete line of industrial lubricants, not just a wide range of products. Fluids for high-volume applications include hydraulic, compressor and vacuum pump, gearbox and chain, and multipurpose oils. Specialized industrial compounds such as greases, pastes, anti-friction coatings, and dispersions must be added to the mix.

In addition, a wide range of base stocks is essential. Synthetics provide excellent resistance to emulsification and last longer to extend maintenance intervals. Ultra-high purity mineral oils also resist emulsification and promote improved additive performance, which results in longer life than conventional mineral oils. The full-line supplier also must be able to draw on functional additive technologies including anti-oxidant, anti-wear, and extreme temperature additives.

How well does the local representative understand my needs and the lubrication requirements of my equipment?
Effective lubricant consolidation demands technical support from local representatives who understand both lubricants and the operating conditions in common industrial equipment. Air compressors, for example, put unique demands on lubricants. Typical operating temperatures around 210 F accelerate reactions between compressed oxygen and impurities, especially those found in mineral oils. The resulting rapid oxidation causes a sudden increase in viscosity and lubricant failure. Mineral oils in air compressors generally last only 1000 hours. By comparison, a synthetic compressor oil, specially formulated for air compressors, lasts around 12 times as long.

Other applications impose their own requirements. Equipment subject to daily wash downs, for example, requires gearbox and conveyor chain lubricants that resist emulsification. Knowledgeable consolidated lubricant suppliers understand such applications and know the right lubricants to use at the right time. Their expertise helps maintenance professionals avoid mistakes in lubricant selection and application that can shorten equipment life and stop production. They also can help install lubrication management software and show how it can help achieve additional efficiency improvements.

Does the supplier offer oil analysis?

To gauge the condition of industrial lubricants in service, an integrated oil analysis program is essential to compare each lubricant with its own performance benchmarks. Effective analysis tracks multiple critical wear-related characteristics of oil in service by comparing the results with previous reports, and notes the trends. As an essential part of a lubricant consolidation program, oil analysis helps identify contamination, lubricant degradation, and abnormal machine wear. Industry-accepted tests reveal the presence of metal particles, water, and other contaminants.

The wise use of oil analysis data can play an instrumental role in significantly lowering overall costs associated with oil changes and helping to extend equipment life. Analysis, for example, can prevent needless, costly oil changes dictated by simplistic predictive time interval schemes while, in other instances, it can provide criteria that may lead to savings by extending oil drain intervals. In addition, trend data can provide criteria for the design and rationalization of preventive maintenance routines that lend themselves to computer-based management.

How good is the supplier's lubrication management software?

Dedicated lubrication management software is a powerful tool to schedule, supervise, and record a consolidated lubrication program. It exploits and complements oil analysis by collecting trend data and developing responsive lubrication schedules. By enabling maintenance managers and workers to schedule and record lubrication changes for specific equipment, lubrication software automates the lubrication management function.

While general maintenance work management software cannot manage complex lubrication programs, dedicated lubrication management software can generate actionable lubricating information. In so doing, it helps reduce lubrication errors by automatically generating information that helps coordinate daily maintenance routines in the most efficient manner possible. The software also identifies opportunities to more efficiently schedule lubricant orders and reduce inventory.

Be sure the dedicated lubrication management software provides the following functions:

First, it should centralize lubrication requirements and protocols for an entire plant. It should catalog what lubricant is required when and how it should be applied for every lubrication point in the plant. The database should provide a proactive preventive maintenance tool that can save time, reduce risk of errors, and make it easy to record completed lubrication tasks.

Second, effective lubrication management software should help create and schedule lubrication routes for thousands of points within a plant. In addition, scheduling software can generate lubricating work orders and monitor the performance of lubricants and maintenance employees.

Finally, dedicated lubrication management software should help broaden lubrication schedules and records to cover multiple sites. **MT**

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