

## Industry Outlook: Factoring Lubricants Into The Overall Equation

Written by Lee Culbertson, President, Royal Purple, Ltd.  
Friday, 01 August 2008 00:00

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For more than 20 years, Royal Purple has been a proponent of applying lubrication technology as a way to quickly and inexpensively attain significant improvements in plant rotating equipment reliability. Our corporate mission fits perfectly with the editor's request to share with readers how we are addressing industries' accelerating trend toward "greening," dealing with soaring energy costs within the scope of this magazine's core emphasis on capacity assurance solutions.

Over these two decades, our message often has fallen on the deaf ears of companies that have felt no need to replace less-expensive lubricants that met the equipment manufacturer's requirements. To these companies, premium lubricants were an added cost—*one that could only be justified as a possible solution for problem equipment.*

Today, industry no longer can afford to take such a short-sighted view. World economics are forcing companies to become leaner, more efficient and more productive with their assets. What once might have been "adequate" must now be replaced by what is "optimum" in attaining these objectives. Maximizing productivity requires that the assets remain productively on line, and for many companies this means their rotating equipment.

Another factor that no longer can be ignored is that "cost of energy" is by far the single greatest cost of owning and operating equipment. The prices for all forms of energy have skyrocketed. Now, it is becoming obvious to increasing numbers of companies that the quality of lubricant they select can significantly influence how reliably—and *how efficiently*—their equipment will operate.

Royal Purple is especially well-positioned to provide solutions to these issues. It has been a

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pioneer in developing lubricant solutions to maximize the reliability and efficiency of large populations of equipment. We refer to this as offering a "Lowest Total Cost of Ownership" approach to lubricant procurement. One big upside to this approach is that it is a very "green" move as well.

Upgrading to premium lubricants produces savings through a mix of increased equipment reliability (more production and less maintenance cost), energy savings and longer oil drains (reduced purchase and disposal cost). Some companies, though, have reported that their most significant savings are coming from greatly increased production speeds attained with the same equipment.

Energy savings are the easiest of the savings to document because they are a day-to-day operating cost. Our data shows that a 3% reduction in energy use is readily attainable. One of the most recent and best documented examples of this is from a large steel mill that converted five large compressors totaling 28,500 hp. It is important to note that all temperatures were recorded along with both digital and analog air flow readings to accurately determine comparative power factors. Their calculated savings were 6,074,385 kw/yr valued at \$547,000/yr. In fact, the total cost of the lubricant was recovered within 100 days.

Maintenance savings will vary greatly from plant to plant—*and must be tracked over time*. But, a 30% reduction in the need for maintenance from upgrading lubricant quality is not uncommon. Reducing maintenance also reduces accidents. Extending oil drains can also reduce oil usage to as little as one-fifth of previous volumes. Lubricant upgrades aren't just effective, they truly are low-hanging fruit. It is not often that so many benefits can be attained by a simple change in purchasing practices.

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*This article is part of Maintenance Technology's 2008 Industry Outlook, the annual executive roundtable. Columns from each of the 14 thought leaders who participated can be found at the following link: <http://www.mt-online.com/article/0808-industry-outlook>*

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