

Your company can achieve significant energy and bottom-line savings by implementing an effective motor management plan. With a well-defined, proactive plan in place, you are in position to optimize the benefits of NEMA Premium™ motors and best practice repair. But, the savings don't stop there.

Examining and optimizing motors as part of an overall system can elevate benefits to the next level. Savvy facility managers realize that the savings and productivity gains that can be achieved by optimizing motor-driven systems can be greater than the combined savings of upgrading individual components.

Our July column highlighted the benefits of adjustable speed drives in appropriate applications. This was a first step in looking at motors as part of a larger system. A logical next step might be to identify motor systems that are common to a variety of industrial processes and commercial applications, e.g. compressed air, pump and fan systems.

According to the Department of Energy (DOE), motor-driven systems account for 64% of the electricity consumed in the U.S. industrial sector. Furthermore, significant reductions are possible through the use of proven equipment and technologies.

Compressed air systems, for example

Compressed air, a utility that is generated inhouse, serves a variety of applications. While a majority of industrial facilities have compressed air systems, few realize that compressed air generation accounts for a significant portion of their facility's energy consumption or that these systems can be notoriously inefficient—as low as 10-20%.

System optimization measures include identifying systems that are leaking or poorly configured for end use, and reducing system air pressure or running times. Both the [Compressed Air Challenge Website](#) and [DOE's BestPractices Website](#) offer a wide array of resources to help facility managers understand and capture these benefits.

Boosting Your Bottom Line: Optimizing Motor-Driven Systems Can Save Big

Written by MT Staff

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Optimization resources are available

The [Department of Energy's Website](#) provides optimization resources for other motor-driven systems as well. These include sourcebooks, software tools, tip sheets, technical fact sheets, handbooks and even market assessments for the following areas: steam, process heating, motors, pumps and fans. The Environmental Protection Agency is yet another valuable resource. This agency's Web site, www.energystar.gov/, provides information and tools to help facility managers who are interested in generating energy and cost savings. (Tune in next month to learn more about the EPA's energy management strategies for achieving continuous improvement and its benchmarking tools for commercial and industrial facilities.) The Motor Decisions MatterSM Web site provides links to additional optimization resources and information about funding sources for energy efficiency across the U.S. and Canada. Visit www.motorsmatter.org, and click on Helpful Resources.

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The Motor Decisions Matter campaign is managed by the Consortium for Energy Efficiency, a North American nonprofit organization that promotes energy-saving products, equipment and technologies. For further information about MDM, contact Ilene Mason at imason@cee1.org or (617) 589-3949, ext. 225.