Now is probably as good time as any to take our motor management quiz. That's because it's true: An ounce of prevention is worth a pound of cure. By answering a few simple and timely questions, you can improve the operating efficiency of important motor-driven equipment such as pumps, fans, conveyors, blowers and air compressors. Even more importantly, addressing these issues early can improve system reliability, preventing system failure and costly downtime.

The following three questions (along with your responses to them) will go a long way in helping you assess the state of your facility's motor system management. Remember, planning for efficiency and reliability is easier than managing unexpected equipment failure and downtime.

#1. Does your facility have a current motor inventory?

A motor inventory is a list of every motor in a facility, its size, nameplate efficiency, operation, load factor, run-hours and maintenance history. With an up-to-date motor inventory, you can ensure that the most efficient motors are the most often used, track "problem" motors (those with histories of repeated failure), identify candidates for cost-effective replacement and keep these motors in stock to minimize downtime. Ask a vendor or service provider in your area for assistance, or use the simple inventory feature in DOE's Motor Master+ [Ref 1].

#2. Does your facility have guidelines for repair-replace decisions?

It is easier to manage a plan than a crisis. Know what will be done with every motor upon failure by creating repair-replace decision guidelines. The information in your motor inventory, along with local motor repair prices, purchase prices and electricity rates, will assist you in determining the cost-effective choice. (A free MDM calculation spreadsheet, the 1*2*3 Approach [Ref. 2] can help you do this in three easy steps.)

#3. Does your facility specify best-practice repair?

Best-practice rewinds, as defined by the ANSI/EASA AR 100 standard [Ref. 3], return a motor to its nameplate efficiency. Without this type of specification, a repair could result in a unit that operates less efficiently and, in the event that this motor has significant damage, could compromise reliability. Take the time to check out the best practice repair resources available through the Motor Decisions Matter Website, and contact your motor service provider to develop a specification for your facility.

If you answered “yes” to all three questions here, you are on your way to preventing unexpected downtime through motor system management. Fortunately, many organizations can help you plan for reliability, including your local electric utility, motor distributor, motor service center, and government agencies. Additionally, the MDM Website (www.motorsmatter.org) has resources specifically designed to help you get started. Why wait for a crisis? Prevent it with proactive motor system management. (BTW: Visit the MDM site for a bonus question on variable speed drives.) **MT**

1. http://www1.eere.energy.gov/manufacturing/tech_deployment/software_motormaster.html

2. http://www.motorsmatter.org/tools/123approach.html

3. http://www.easa.com/sites/default/files/AR100-2010_1010-2.pdf