Robert C. Baldwin, CMRP, Editor

I had the opportunity last month to meet with the Maintenance Excellence Roundtable and tour the plant of this year's host Dofasco, said to be the most profitable integrated steel maker in North America. The Maintenance Excellence Roundtable is a group of companies that meets once a year at a member plant to network and share best practices. Other members, in addition to Maintenance Technology, are Alcoa, Baxter Healthcare, Conoco, Dupont, Exxon/Mobil, Honeywell, Kodak, Novartis, Sonoco, and the U.S. Postal Service.

One of the more impressive parts of the tour of the Dofasco site in Hamilton, ON, was its electrical repair shop, a 25,000 sq ft facility where approximately 2500 motors and generators, plus 450 electrical breakers, are serviced each year. The operation, which is QS9000 certified and employs a staff of 42 people, has an annual budget of $5 million.

Realizing that equipment reliability was vital to improving product quality, production output, costs, and shareholder return, Dofasco managers initiated a strategic project in the early 1990s to research, develop, and implement the most advanced maintenance practices and information technologies to achieve maximum equipment reliability (the process is outlined in the article "Achieving Maximum Equipment Reliability" on page 28).

The motor repair shop is recognized as a core competency in the Dofasco asset management strategy. It produces an estimated repair work cost saving of $1.5 million per year and directly affects equipment reliability in the mill.

The shop emphasizes comprehensive record keeping. A new system now being rolled out will use a bar coding system driven by handheld data loggers to obtain real time motor data during the repair process. The system contains nameplate data, performance data, test and repair records, and reliability information on motors that affect manufacturing equipment reliability. Such information is a prerequisite for making informed business decisions about motor management.

Yes, most plants don't have the wherewithal to invest in motor management anywhere near the scope of the Dofasco program. But that is no excuse for not managing electric motors to provide reliable and energy efficient systems. The motor data to begin a program can be downloaded for free over the Internet. The article "Electric Motor Energy and Reliability Analysis" on page 17 provides the details.

If there is a valid excuse for not managing electric motors, I don't know what it is. It certainly isn't the expense of obtaining motor reliability and performance data. **MT**