

# Teach Operators Maintenance

Seven steps toward relieving the headache of equipment breakdown.

**H**ow many times can you apologize to a customer for a late order resulting from equipment failure? Did the machine's operator mention to the maintenance department that the equipment seemed out of whack? Why didn't maintenance get to it right away? Who needs these headaches? More importantly, how can these breakdowns be prevented?

Total productive maintenance is a management technique that involves everyone in the plant in maintaining and using equipment. Autonomous maintenance, a part of total productive maintenance, involves individual machine operators in the daily inspection and cleaning of the equipment. Autonomous maintenance teaches operators to maintain correct equipment conditions independent of the maintenance staff. The "I run the machine, you fix the machine" attitude is thrown out the window as employees join together to take responsibility for their equipment and plant. Autonomous maintenance can lead to increased machinery uptime, better performance rates and improved employee teamwork.

Not all maintenance activities are handed over to the operator, but the employee should do certain tasks to help maintain the machine, such as basic inspection, lubrication, adjustments, basic repair and part replacement, precision checks and routine cleaning. Early detection of abnormal conditions can solve problems later. It is more effective to have the operators perform these activities because they are the ones using the equipment on a daily basis, and they can often sense when equipment is not func-

tioning optimally. Manufacturers who adopt this maintenance approach, instead of a repair approach, can free maintenance personnel for planning and special projects.

The seven basic steps of autonomous maintenance as provided by Productivity Inc. (Portland, OR):

**Step 1: Initial cleaning and inspection.** Stabilize and examine the equipment, so worn parts and potential problems can be detected.

**Step 2: Eliminate sources of contamination and inaccessible areas.**

Start a program to reduce the cause of contamination. Seize opportunities to make equipment easier to maintain and more accessible for operators.

**Step 3: Lubricate and establish provisional standards.** Develop standards for lubrication.

**Steps 4 and 5: Conduct general and autonomous inspections.** Look for and identify problems with equipment and prepare for larger maintenance activities by understanding the operation principles of the machine.

**Step 6: Improve workplace management and control.** Organize the work area and eliminate clutter.

**Step 7: Move forward with advanced improvement activities.** Set an agenda for continuous improvement and stick to it.

Switching from a reactive to a proactive maintenance approach can take time, but in the end the change keeps operations running efficiently, and abnormalities are caught before they turn into production-stopping problems.—*Gillian Babicz*



Source: Productivity Inc.