

The Weyerhaeuser mill maintenance system at Springfield, Ore.

Scot C. McMath

Because of increased productivity, we have been able to take mechanics from the work force to help develop our preventive maintenance system, do planning, and participate in training.

A computerized maintenance system is a number of integrated computer programs that help a maintenance department manage day-to-day maintenance activities. The system will contain most of the following sub-systems: equipment records, work orders, a preventive maintenance scheduling system, employee records, a timekeeping system, and a stores/purchasing system. The maintenance system may have: a capital tracking sub-system and a financial system interface. The system can also contain information such as mill safety procedures and hazardous chemical data.

The computers that these maintenance systems run on range from the small single-user personal computer to the largest of the modern mainframes. Some systems are designed to be used by just a few key maintenance people, others provide the information management needed not only by the maintenance department, but also for the entire mill.

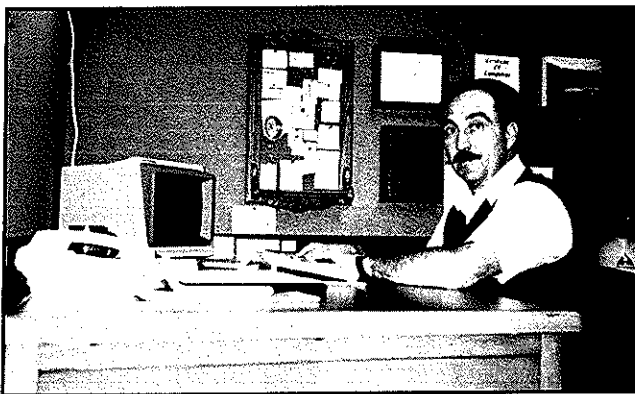
These maintenance systems are used to track equipment movement and costs, manage work order backlogs, and schedule preventive maintenance activities. They help to manage storeroom inventories as well as write purchase orders and maintain vendor files. The system at Weyerhaeuser Paper Co. in Springfield, Ore., runs on a Hewlett-Packard 3000. The software was written and developed by Weyerhaeuser.

In 1977, the maintenance department at Springfield identified a need to better manage its work-order backlog. We felt that if we could understand the work we were doing to maintain our mill, we would be able to do a better job at a reduced cost.

We developed a pilot work-order system on a time share basis on one of the company's computers in Tacoma, Wash. The pilot system let us look at our work backlog in all kinds of new ways. We now could easily find all the shutdown work orders, and tracking safety work orders was no longer the headache it had once been.

With the pleasant experience of the pilot system as an inducement, we set out to design a system. With other Weyerhaeuser fiber mills, we formed a client committee

Integrated computer program software, developed by Weyerhaeuser, helps Scot C. McMath manage day-to-day maintenance activities.



to work with Weyerhaeuser Information Systems to develop a mill maintenance system. Over the next two years, the client committee developed a core maintenance system. This core system became the basis for the mill maintenance systems now used by most Weyerhaeuser fiber mill maintenance departments today. The same client committee still meets yearly to discuss and develop enhancements to the mill maintenance system.

The users of the mill maintenance system—what we call MMS—can be a mechanic who is viewing equipment records to obtain parts information, the planner creating a work order for an upcoming shutdown, the clerk who is doing the timekeeping for the previous day, or an engineer who is updating his capital project.

One of the uses of the mill maintenance system that we are most excited about is preventive maintenance. Presently we have 18,000 paper machine tasks that are scheduled by the computer. The tasks cover some 16,000 pieces of equipment in our mill. Scheduling and tracking this amount of work would be impossible without a computer.

Break-in work is costly and inefficient. We track adherence to planned/scheduled work to inform our maintenance managers of the amount of break-in work that is being done in each area so that they can take steps to reduce it.

McMath is mill maintenance system manager for Weyerhaeuser Paper Co., Container Board Division, P.O. Box 275, Springfield, Ore. 97477.

We use MMS to help gather work lists for scheduling shutdown work prior to an outage. With this information, we can plan the most efficient way to schedule our mechanics and contractors and obtain the needed materials for delivery at the proper time. In May 1986, we were able to manage the largest mill outage for maintenance we had ever attempted. We did the work that we had planned to do and the mill started up on time.

Increased productivity is another benefit of MMS at Springfield. We have saved each of our foremen $2\frac{1}{2}$ h/week by doing the timekeeping on the computer. Our mechanics are on the job nearly $\frac{1}{2}$ h earlier each day because work orders are more thoroughly planned and scheduled. Because of increased productivity, we have been able to take mechanics from the work force to help develop our preventive maintenance system, do planning, and participate in training.

As the maintenance department at Springfield begins the seventh year with our mill maintenance system, we can't imagine doing our work without our computer.

Based on a presentation given at TAPPI-WEST 87.

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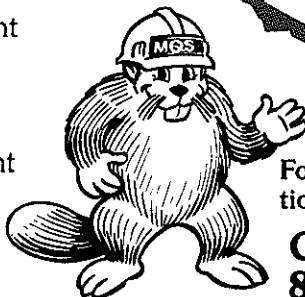


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