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from specialty «Mechanical Engineering»

Discipline RT 4319 «Repair technology»

Module AP 9 «Production automation»

LECTURE NOTES

Topic 5 Scheduled preventive repairment

When most people think of preventive repairment, they visualize scheduled, fixed-interval repairment that is done every month, every quarter, every season, or at some other predetermined intervals. That timing may be based on days, or on intervals such as miles, gallons, activations, or hours of use. The use of performance intervals is itself a step toward basing preventive tasks on actual need instead of just on a generality.

The two main elements of fixed-interval preventive repairment are procedure and discipline. Procedure means that the correct tasks are done and the right lubricants applied and consumables replaced at the best interval. Discipline requires that all the tasks are planned and controlled so that everything is done when it should be done. Both of these areas deserve attention. The topic of procedures is covered in detail in the following sections.

Discipline is a major problem in many organizations. This is obvious when one considers the fact that many organizations do not have an established program. Further, organizations that do claim to have a program often fail to establish a good planning and control procedure to ensure accomplishment. Elements of such a procedure include the following:

1. Listing of all equipment and the intervals at which they must receive preventive repairment
2. A master schedule for the year that breaks down tasks by month, week, and possibly even to the day
3. Assignment of responsible persons to do the work
4. Inspection by the responsible supervisor to make sure that quality work is done on time
5. Updating of records to show when the work was done and when the next preventive task is due
6. Follow-up as necessary to correct any discrepancies.

Note that there are variations within the general topic of scheduled fixed interval repairment. Some tasks will be done every Monday whether or not they are necessary. Inspection may be done every Monday and preventive tasks done if a need is indicated. Seasonal repairment may be directed by environmental changes rather than by strict calendar date. Use meters, such as an automobile odometer, allow quantitative measure of use that can be related to the parameters that will need to be maintained. One must consider the relationship of components to the meter readings; for example, a truck's need for repairment will vary reatly depending on whether it is used for long hauls or for local deliveries. A truck that is started every few miles and driven in stop-and-go, dusty city conditions will need more frequent mileage repairment than the same truck used for long trips of continuous driving.