

METHODS OF IMPLEMENTING THE MAINTENANCE ACTIVITIES

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Industrial maintenance consists of a group of measures and actions that allow prevention, good maintenance or reset of an equipment into a stipulated state or make it fit for securing a determined service while minimizing maintenance costs.

The industrial facilities' economic efficiency is influenced by the equipment availability that may be increased by a better organized maintenance activity.

Some of the maintenance works execution methods are detailed in this paper, as recommended by the literature of speciality.

The method of individual repairing applies to the industrial units having a small variety of equipment types, even sole exemplars. The main characteristics of the method is that the parts dismantled from the equipment, after cleaning, control and reconditioning are being reassembled together with the new parts on the equipment during the repairing.

The method of repairing by sub-assemblies applies to the industrial facilities endowed with a small variety of machine types. The enforcement of this method is conditioned by the existence of a reserve stock containing sub-assemblies identical with those on the machines from the production sections and which are meant to replace the faulty ones.

The method of repairing by using the reserve equipment applies to the industrial facilities with a rather homogenous character of production/output that requires a greater number of machines of the same type.

The method consists of acquiring certain machines to replace the malfunctioning ones and it applies to complex maintenance works. The main advantage of this method is the reduced period of immobilization of the equipments undergoing repairing, this including the necessary time to dismantle the defected equipment and the necessary time to set up the reserve equipment.

The method of critical path is recommended for the complex maintenance works for the group of machines containing multiple gears, so that the elaborated graph may be standardized and thus used in the current maintenance activity.

This method consists of taking the parts or subunits that need repairing through successive and different work locations placed according to the succession of the repairing executions and it is characterized by a high level of qualification of the working places.

Choosing one or the other of the maintenance works execution methods must be done according to the type and number of machines of the same kind. The solution chosen must lead both to a decreased pausing duration of the equipment and to an increase of their availability.

BIBLIOGRAPHY

1. Bărbulescu C., ș.a. Cartea mecanicului șef din unitățile industriale. Editura Tehnică, București, 1983
2. Borza Anca Managementul întreinerii și reparării utilajelor. Editura Economică, București, 1995
3. Deac Vasile Managementul mentenanței industriale. Editura Eficient, București, 2000
4. Narayan, V. Effective Maintenance Management. Risk and Reliability Strategies for Optimizing Performance. Industrial Press, New York, 2004