

SYSTEM MAINTENANCE DECISION MAKING BASED ON REPAIR RATE STATISTICS

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Abstract: *This paper presents a novel approach for estimation of repair rate in an observed system comprised of two or more components. The presented approach is based on calculation of probability density function of maximal and minimal system's repair time by observing the repair rates of its components. Based on the obtained information it can be concluded in which time interval the repair or replacement should be completed in order to achieve the desired level of availability. The model can be further used for planning of maintenance activities, inventory, servicing capacities and dynamic forecast of system characteristics.*

Keywords: *Repairable system, Repair rate, Availability, Maintenance*