

Repair time threshold for maintenance activities planning

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This work introduces a novel approach for estimating the repair rate of an observed system comprised of multiple components. The presented approach is based on the calculation of the probability density function (PDF) of a systems repair time by observing the probability that repair rates of its components surpass a determined threshold. Based on the obtained method, it can be concluded at what interval maintenance, repair, or replacement should be performed in order to achieve the desired level of availability. The method can be further used for planning maintenance activities and a dynamic forecast of system characteristics.

References

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