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**SELECTION OF METHOD FOR OPTIMIZATION OF VEHICLE
 MAINTENANCE AND REPAIR SYSTEM TAKING INTO ACCOUNT
 OPERATING CONDITIONS**

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ABSTRACT

In broad terms, maintenance optimization models includes the mathematical models focused on finding either the optimal balance between costs and benefits of maintenance or the most appropriate time to execute maintenance. Parameters often considered in this optimization are the cost of failure, the cost per time unit of downtime, the cost (per time unit) of corrective and preventive maintenance and the cost of repairable system replacement. The foundation of any maintenance optimization model relies on the underlying deterioration process and failure behavior of the component. Over the last decades, maintenance optimization models have received growing attention, and by now it is a well-established area of research. This paper presents a brief review of existing maintenance optimization models. Several reliable models and methods in this area are discussed and future prospects are investigated.

KEYWORDS: *Maintenance Optimization Model, Preventive Maintenance, Corrective Maintenance, Risk Based Optimization, Simulation*

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