

ANALYSIS OF POSSIBILITY FOR APPLICATION OF SOME STRATEGIES BY MOTOR VEHICLE MAINTENANCE

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Abstract: Two types of preventive maintenance are mostly used. First is preventive maintenance based on reliability information (on empirically defined distribution of possibility of work time until breakdown). By application of this type of preventive maintenance, maintenance procedure is planned in order to provide required level of reliability, most often by preventive replacements after a definite work periodicity. Other type of preventive maintenance is based on connection of information about reliability and information acquired in view of constant and systematic follow-up of vehicle (follow-up of selected parameters and indicators that with enough security show its condition).

Strategy of total productive maintenance is based on statement that only by maintenance it is not possible to maintain projected level of reliability during exploitation, but it is necessary to have active participation of users and everyone who is in relation to the maintained vehicle.

Main application of so-called accelerated strategies of maintenance is not to conduct any activity of preventive maintenance if it is not economically justifiable.

Nowadays there is a tendency towards combined application of existing strategies of maintenance. The reason is placed in variety of maintained vehicles. Second reason is existence of flaws of current strategy for maintenance.

Key words: vehicles, maintenance

1. INTRODUCTION

In the area of motor vehicle maintenance, importance of application of the theory of reliability, from the 40s of the 19th century, should be specially emphasized, esp. when it comes to defining regularity of breakdown appearance based on data about vehicle exploitation. Introduction of concept of integral logistic support and facilities of maintenance in the area of motor vehicle maintenance, during the 40s of the 19th century, is also significant for the development of science and maintenance practice. Introducing previous mentioned scientific knowledge enabled introduction of the strategy of maintenance according to reliability and total productive maintenance in the 70s of the 19th century.

Selection of maintenance procedures (preventive, corrective) that should be implemented during the motor vehicle maintenance, in order to provide their maximum reliability and disposability, is in literature often called conception of maintenance. Instead of term conception of maintenance, other terms are used as well: policy of maintenance, strategy of maintenance, system of maintenance. Nowadays many products are applied and their work is based on the fuzzy logic application.

Introduction of information system for easier acquisition and data processing during motor vehicle maintenance represents a great improvement in its maintenance system. It often occurs that objective conditions do not permit gathering of information necessary for statistic processing. If one bears in mind that gathering such information brings some expenditure, that is often a reason for impossibility to gather relevant information. In case when there are no high quality information, information that are incomplete and imprecise are used. It is a particular problem that is difficult to solve.

Path of development of motor vehicle maintenance may be divided in several stages and they are as follows:

First (from the first usage of motor vehicles to 1950), which main essence is to remove breakdown when it appears;

Second (from 1950 to 1980), which main characteristics are lower maintenance costs, longer durability and greater disposability of motor vehicles;

