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THEORETICAL BASIS OF IMPROVEMENT OF STATIC AND DYNAMIC ROTATION OF WHEELED MACHINES

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Annotation. In this article, the work on increasing the rotation of wheels, an effective way of rotation, increasing the angle of rotation of the controlled wheels is analyzed.

Keywords: wheel, turn, machine, rotation, research, driven wheel.

Introduction. Currently, the Republic of Uzbekistan is among the influential countries with developed automotive industry in the world. The reason is that in the Republic, in cooperation with foreign firms, a number of modern auto-enterprises producing various types of cars are being restored, and cars that are compatible with world standards, mainly for passenger transportation, partially for cargo, have their own buyers.

In addition, in the future, Uzbekistan is determined to create a system of movement composition, which has its own private brand and can compete with foreign car duties in its positive aspects. At the same time, the composition of the movement in the national economy and personal use, after passing a certain distance of the road, to provide them with technical services and increasing the efficiency of the current repair process, to maintain their operational and economic indicators in a uniform manner are also among the urgent tasks facing motorists.

Literature view. The first to introduce the laws of motion of the car began with a scientific work devoted to Nezhukovsky "the theory of motion in the turn of the car". In 1921, The "Scientific Research Institute of Automobile and automotor" was established, the work on research and testing of cars was planned. The main works on the theory of cars were written by academician E.A.Chudakov. He was the first to develop the operational characteristics of the car, such as side-loading efficiency and stability. The services of B.S.Falkevich, N.K.Kulikov are great in developing the efficiency of side-spending of the car. It is known that any theory develops successfully only when it is closely related to experience. G.V.Kramarenko, L.L.Afanasev, D.P.Velikanov conducted research on the application of Automobile theory in real conditions. Research methodology. The task of the car, which is considered the basis of the structure of the movement, is an indicator of the effective maintenance of the cargo and passenger transportation process from the point of view of Economy, Environment and safety. To do this, first of all, the car is required to be technically qualitative and profitable. The quality of the car is the sum of the characteristics that ensure its suitability to meet certain operational requirements, depending on its function. Its usefulness, however, is low in overall cost and cost of transportation and is estimated to be high in labor productivity.

The research work and patent data show that the rotation of managed wheels, increasing the circuit corner of the controlled wheels, reducing the size of the wheels, slowing the inside of the internal wheel. Creating additional turn points through.

An effective method of improving the circulation can be managed to increase the corner of the wheels, which will be managed, all wheels. However, in this case, in this case, the back wheel is dangerous moments to ensure the stability of satisfactory action. It complicates the design of the steering wheel-asian. Constructive solutions are provided by constructive solutions to the management laboratory, the discoveries of the Lipetsk tractor plant and others.

Analysis and results. The main disadvantage of roughly constructed machines is the constructive difficultychiliklar when placing the load platform. Another disadvantage of fixed machines is the decrease in the stock of stability, which, regardless of the other, leads to the loss of the stability of one part. The working equipment for the dimensions of the machine significantly worsens the stability of the workbenches to be performed. When planning a machine, the support period is reduced, which leads to a deterioration in the stability of the machine on the cross-handle of the machine.

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Combining the Rotary System. In order to further increase the circulation and maneuverability of tractors and other wheel machines, in most cases, a number of structural solutions are proposed, which represent combined machine rotation systems. The great interest of designers in combining Rotary systems is confirmed by the presence of many inventions (author's certificates are Russian No. 839014, 1092061, US patent 3827517, French patent 2221002, German patent 314787, Italian patent 0084687, etc.). First of all, these solutions include automatic braking of one of the leading wheels of the tractor (or wheel machine), which does not have wheels that can not be controlled. Such a decision is contained in the 839v14-th author's license.

This solution makes it possible to very effectively increase the turning and maneuverability of the machine(a tractor sample of the Lipetsk tractor plant). It is known that the main turning system of the machine (with the braking of the wheels of one of the wheels) and the design solutions in which there are additionally controlled wheels. When approaching the straight line, the change of direction of movement is carried out by the rotation of the wheels, which is controlled. Significant changes in the training and maneuverability of the movement are carried out by the trip rotation system.

Wheeled Wheels (with trip rotation system). The onboard rotation system allows you to get a minimum turn radius (at the border - equal to half the length of the machine). Therefore, the machines produced according to this scheme have the highest turning and stability among the wheels.

Conclusion / Recommendations. In agricultural production, as well as in other areas of production and construction, the analysis of the application of various schemes of regulation of energy vehicles (self-propelled chassis and wheel machines) showed that the most common schemes are as follows:

1) wheel control wheels (front or rear).

2) machines with combined rotation system.

3) machines with turning wheels (turning due to the mandatory change in the speed of rotation of the wheels on different sides).

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