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Program evaluation of the enterprise exploitation service process

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Abstract:

In this article, the industrial infrastructure, first of all, the developed system of roads and railways, their effective functioning is an important condition and factor in reducing the total production costs. This, in turn, enhances the competitiveness of the products and the economy as a whole. In order to ensure the accelerated development of modern production and social infrastructure, and to create favorable conditions for the consistent and sustainable economic growth, a special program "On Additional Measures for Further Development of Production and Social Infrastructure in 2019" was adopted and its implementation under strict control. It is desirable to determine the annual production program for the enterprise a_{pf} using the coefficients of automobile, in this or with the accounting of technical preparation coefficients. Inadequate points of equipment for the lack of conditions for the complete performance of technological processes in the regions and workshops at the enterprise. Should improve the exploitation service at the enterprise. This paper provides designing methodical recommendations and using there results to improve traffic safety in transport.

Keywords:

car, traffic safety, traffic, traffic signs, dangerous site

1. Introduction

Deep transformations, gradual reform and liberalization of all aspects of political and socio-economical life, democratic renewal and modernization of our society are being rapidly developed in our country. The next priority is further development of production and social infrastructure as an important factor of modernization of the country and increasing employment.

Special attention should be given to this priority, which is of utmost importance. There are several reasons.

First, the development of infrastructure will create the necessary conditions for the establishment of new enterprises and development of the economy as a whole, as well as the opportunities for the development of the country's rich mineral resources.

Secondly, the industrial infrastructure, first of all, the developed system of roads [6] and railways, their effective functioning is an important condition and factor in reducing the total production costs. This, in turn, enhances the competitiveness of the products and the economy [3] as a whole.

Thirdly, the development of social infrastructure, provision of the population with clean drinking water, energy, the construction of social facilities and, ultimately, improvement of living standards.

Fourth, infrastructure development is a labor-intensive industry. This will create new jobs, provide employment to the population, especially young people, and increase the incomes and welfare of the people.

The rapid development of passenger cars worldwide in Uzbekistan, with the need to increase the technical rigidity and culture of driving cars, necessitates the creation of a comprehensive network of technical service [4] zones. Many organizations and enterprises in the country are involved in projects of technical service zones.

However, no technical literature has been developed to cover all aspects of TSS yet. This disadvantage, in turn, has a significant impact on the quality and performance of the

work, due to the variety of equipment, despite their generalities. Many car service stations have been designed and used in the global [5] automotive industry.

This article covers the development of new projects of automotive maintenance stations, summarizing their economic and manufacturing processes, taking into account the experience gained in the field of automotive industry.

2. Research methodology

The main purpose of the article is to summarize the design process for the maintenance areas and make recommendations for their efficient use. It provides a feasibility study of the technologies and their technical performance.

In order to ensure the accelerated development of modern production and social infrastructure, and to create favorable conditions for the consistent and sustainable economic growth, a special program "On Additional Measures for Further Development of Production and Social Infrastructure in 2019" was adopted and its implementation under strict control.

Effective operation of the motor transport enterprise is a combination of the efficient operation of working posts in the production regions and workshops. To this end, technological development needs to be assessed in order to further develop the social infrastructure of motor transport enterprises.

The ATC assesses the annual production program using a variety of methods, depending on the impact level. That is, using cycles, rapid computational and computational methods.

3. Result and Discussion

At the same time, the calculator is calculated based on the aggregate data for calculating the daily production volume of the rolling stock at the enterprise (volume of transportation, total annual transportation):

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It is desirable to determine the annual production program for the enterprise α_f using the coefficients of automobile, in this α_f with the accounting of technical preparation coefficients.

$$\alpha_i = \frac{D_r \cdot \alpha_T}{D_c} \quad (1)$$

In this regard, it is necessary to take into account the annual production volume of the rolling stock in ATC.

Carrying out an assessment of the composition of the vehicles involved in the transport of vehicles by the coefficient of use of cars in scientific terms is as follows;

$$Q_{year} = Q_{day} \cdot 361 \cdot \alpha_f = \frac{T_N \cdot \vartheta_T \cdot \beta \cdot q \cdot \gamma_e}{L_{day} + \varepsilon_{ot} \cdot \vartheta_T \cdot \beta} \cdot 361 \quad (2)$$

Here is; Q_{year} – daily traffic amount

T_N – time in work

ϑ_T – technical speed

β – using distance coefficient.

q – nominal load capacity.

γ_e – use of cargo handling capacity.

L_{day} – daily walking distance.

ε_{ot} – overloading time.

According to this assessment, annual transportation α_f is related to the use of in-house car ratios.

In order to calculate α_f the ratio of use of in-house vehicles, it is necessary to α_T . First evaluate the technical readiness ratio according to operating conditions:

$$\alpha_T = \frac{1}{1 + L_d \left(\frac{d}{1000} + \frac{D_c}{L_{cr}} \right)} \quad (3)$$

The evaluation process should be based on the total cost of car maintenance and the total annual maintenance;

You should first take into account the annual distance for your product.

$$EL = A_i \cdot L_d \cdot 365 \cdot \alpha_i \quad (4)$$

Here is; A_i – number of automobiles

Expression studies were performed on the example of auto-assembling No. 11 at Marjanbulak gold-ore deposit in Gallaaral district.

Particularly in it: the automobiles [1, 7] in enterprises $A_i = 75$

Identified the normal amount of walking distance to full repair $L_{cr} = 520000 \text{ km}$ the amount of heavy conditions $L_{cr} = 385000 \text{ km}$.

1- TS distance $L_1 = 3000 \text{ km}$

2- TS distance $L_2 = 10000 \text{ km}$

Daily walking distance $L_D = 210 \text{ km}$

Comparison dates of automobiles 2-TS and CRd = 0.315 days DR=24 day enterprises working day 305.

These information were taken for the exploitation condition from the experimental research center MAHSERVIS in Jizzakh city, Sharof Rashidov street. The calculation for the whole enterprise is made as follows.

$$N_{c1} = \frac{L_{cr}}{L_{c1}} = \frac{385000}{385000} = 1 \quad (5)$$

$$N_2 = \frac{L_{cr}}{L_2} - N_{cr} = \frac{386000}{10000} - 1 = 38.5 - 37 \quad (6)$$

$$N_1 = \frac{L_{c1}}{L_1} = N_{yer} - N_2 = \frac{386000}{3000} - 1 - 37 = 90 \quad (7)$$

$$N_{dc} = \frac{L_{cr}}{L_{dr}} = \frac{386000}{25000} = 1540 \quad (8)$$

$$D_{7K} = \frac{L_{cr}}{L_{dr}} = \frac{386000}{250} = 1540 \quad (9)$$

During the cycle standing days in 2-TS, CR and DR

$$D_T = \frac{L_{cr} \cdot K_T}{1000} D_{cr.te} \cdot N_{xe} = \frac{0.315 \cdot 38600}{1000} + 24 \cdot 1 = 145 \text{ day} \quad (10)$$

$$\alpha_T = \frac{D_E}{D_E + D_T} = \frac{1540}{1540 + 141} = 0.91$$

According to the calculation the automobiles in enterprises α_T -Technical preparation coefficient of vehicles in the company is calculated for the exploitation condition for the company as follows:

$$\alpha_T = \frac{1}{1 + L_{dr} \left(\frac{d_2 \cdot K_2 + d_{dr} \cdot K_{cr}}{10000} + \frac{D_{cr}(\eta_u - 1)}{L_{cr} \cdot \eta_i} \right)} \quad (11)$$

Here is: $d_{2n} d_{pr} \cdot 2 - TS$ ba CR Comparing days

$$d_2 = \frac{D_2 \cdot 1000}{L_2} \text{ day} / 1000 \text{ km} \quad (12)$$

$$d_{cr} = d - d_2 \text{ day} / 1000 \text{ km} \quad (13)$$

d-2-TS and in CR normative general comparing days

$$d = d^h \cdot k_y \quad (14)$$

for quarry $d^h = 0.1 \text{ day} / 1000 \text{ km}$ coefficient of correction $K_i = 1.26$ $d = 0.5 \cdot 1.26 = 0.63 \text{ km} / 1000 \text{ km}$

$$d_2 = \frac{1 \cdot 1000}{10000} = 0.1 \text{ km} / 1000 \text{ km}$$

$$d_{cr} = 0.63 - 0.1 = 0.53 \text{ km} / 1000 \text{ km}$$

K_2 The coefficient that takes into account the type of movement is equal $K_2 = 2.011$ for the Gallaaral quarry.

K_{cr} – Current repairing works volume that takes into account coefficient $K_{cr} = 0.5$

According to above mentioned information α_T -technical preparation coefficient is determined.

$$\alpha_i = \frac{1}{1 + 250 \left(\frac{0.1 \cdot 2.05 + 0.53 \cdot 0.5}{1000} + \frac{24(2-1)}{386000} \right)} = 0.88$$

As it is seen from the calculation, $\alpha_i = 0.88$, it is necessary to revise the normative parameters for the enterprise in order to improve the expropriation service at the enterprise. Depending on the ratio of α_i -technical readiness to use in cars, the ratio of coefficients is determined as follows.

$$\alpha_i = \frac{D_y}{D_{cy}} \cdot \alpha_T \cdot K_i \quad (14)$$

Here is; K_i – is the coefficient for the reduction due to technical problems with the use of vehicles under the conditions of expropriation.

$$1. \quad K_i = \frac{D_{EY}}{D_Y \cdot \alpha_T} \quad (15)$$

Here is; D_{EY} – annual exploitation days.

ATC for specific excretion conditions is calculated as follows:

$$K_i = \frac{D_{EO}}{D_i \cdot \alpha_T} = \frac{301}{301 \cdot 0.88} = 1.13$$

$$K_i = \frac{301}{301 \cdot 0.91} = 1.10$$

For the real condition of enterprise

$$\alpha_i = \frac{301}{301} \cdot 0.88 \cdot 1.13 = 0.830$$

During cycle for the condition of enterprise

$$\alpha_i = \frac{301}{301} \cdot 0.91 \cdot 1.1 = 0.836$$

In terms of operating environment at the enterprise

$$\alpha_i = \frac{D_y}{D_K} \cdot \alpha_T = \frac{301}{301} \cdot 0.88 = 0.73$$

4. Conclusion

In conclusion, it should be noted that for the enterprise, the same type of cars $\alpha_i = 0.73, \alpha_i = 0.830, \alpha_i = 0.836$, can be interpreted as:

1. Due to non-conformity of operation requirements of DTC



2. $A_i = 75$ per day the technical parameters of $A_i=62$ correspond to technical parameters, while, $A_i = 13$, exactly 17% of the vehicle is not technically ready for work;

3. Inadequate points of equipment for the lack of conditions for the complete performance of technological processes in the regions and workshops at the enterprise.

4. Should improve the exploitation service at the enterprise.

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