

[7].

3...5

3-5

() . . . () [8].

[7].

$$Y_i = \frac{i}{i}, \quad i > i \quad (1)$$

$$Y_i = \frac{i}{i}, \quad i < i$$

$i, i -$ $i-$
 $Y_i, Y_i -$ $i-$

$$= \sum_{i=1}^n Y_i B_i, \quad (2)$$

$B_i -$ $i-$

$i-$

[7].

[7]

5

$$R_{ij} = \frac{1}{n} \sum_{i=1}^n \frac{R_{OCT_i}}{R}, \quad (3)$$

$R_{OCT}, R -$ $i-$;
 $n -$ $i-$;

() .

T_i

i

1000 -

$$T_i = P_i t_i,$$

(4)

$$i = P_i C_i, \quad (5)$$

, T_i , i -

i -

;

P_i -

, . 1000 - ;

t_i -

i - ;

C_i -

i - .

(

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22 .,
 -238 - 26 ,
 -240 - 32 .
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22

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86%
26...32

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83...92%

-240

"b"

t_m

[7].

$$\frac{1}{b} = \frac{\sum_{i=1}^m R_i^b \ln R_i + \sum_{j=1}^{N-m} T_j^b \ln T_j}{\sum_{i=1}^m R_i^b + \sum_{j=1}^{N-m} T_j^b} - \frac{\sum_{i=1}^m \ln R_i}{m} \quad (6)$$

$$t_m = \left[\frac{\sum_{i=1}^m R_i + \sum_{j=1}^{N-m} T_j}{m} \right]^{\frac{1}{b}}$$

$m -$
 $R_1 \dots R_m -$

$1 \dots N-m -$

()

$$(b_{k-1} - b_k) \leq \varepsilon, \quad (7)$$

$\varepsilon -$, 0,001.

-

R_γ

$$R_\gamma = \left(\ln \frac{\gamma}{100} \right)^{\frac{1}{b}} t_m^{\frac{1}{b}} + t_c, \quad (8)$$

$t_c -$

R_{cp}

$$R_{cp} = t_m^{\frac{1}{b}} + t_c, \quad (9)$$

1 -

$$f(t) = \frac{1,78(t-500)}{3154} \exp\left[-\left(\frac{t-500}{3154}\right)^{1,78}\right], \quad (10)$$

(\rightarrow max, \rightarrow max).

(n \rightarrow min)

(t \rightarrow min),

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(\rightarrow min).

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(W \rightarrow max),

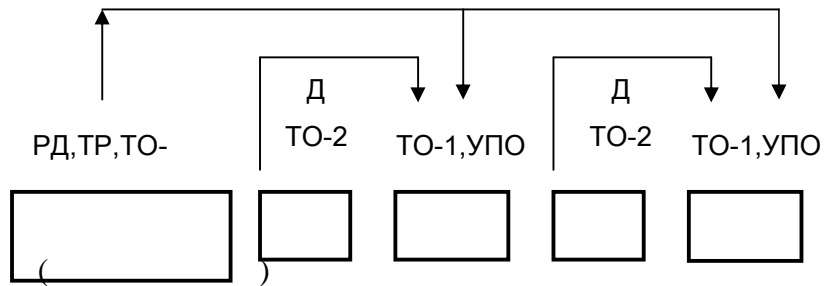
(II-, I-)

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6. ... , 2003. - 992 .
7. ... : 052004. - , 2010. -
8. ... , 1996. - 50 .

15-20 % 20-30 % ,

Summary

Set of theoretical development, means of technical service, technological recommendations allowed to form a system of agricultural machinery service. Developed methods for controlling the level of technical condition and reliability of machines for the basic cycle of agricultural machines. The relationship between the level of technical condition and performance reliability of tractors. Improved methods of structural improvements tractors. Implementation of the main provisions of this system in agricultural production made it possible to control the level of technical condition and to improve the reliability of machines. In conclusion the operation of tractors increased by 20-30%, reduced downtime due to technical reasons by 15-20%.