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OJECOf quality of products in the field of agricultural machinery

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Rozhlyanuto terms of providing quality products in the field of agricultural engineering based on scientific based methods of forming and calculation of its performance and value brought failures of the system for watering livestock.

Qualitying product reliability, reliability, durability, rejection and repair.

Resolutionska problem. PROBLEMSma ensure product quality has always attracted the attention of scientists, producers and operatives. Even sharper it is now in the transition to market economy, increased competition domestic producers as between themselves and foreign firms. Of particular importance is improving product quality in engineering, the level of which determines the rate of technological progress in all other areas. This increase in product quality must take into account the economic feasibility as improving the quality limits determined not end technical capabilities and economic efficiency □1,2□

AnaLiz recent research. One of the most important parts complex and multifaceted problem is improving product quality evaluation. The reason is that you can not work effectively to improve the quality without evidence-based methods of formation and calculation of its indices. Background assessment of product quality in engineering due to the fact that to date components reliability - reliability and durability, the level of which for these products is the main when assessing their quality, no satisfactory methods of calculation with the exception of statistical failure of the product □2, 3, 4 □

In most it relates to longevity, which should be evaluated optimal service life of machines that determine the rational use of this important part of the production potential, improve production by increasing productivity and reducing production costs.

The basis for the economic evaluation and establishing optimum service life of the machine that quantitatively express their longevity are the evolution of current and capital expenditures using technology because of the physical and moral deterioration. The economic impact of this in general terms studied, but almost no theoretical justification dependences of the cost in time, a particular type of function, lack of differentiation of these costs on items costing □4, 5, 6□.

Metand dossurvey findings -

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productionsher in the field of agricultural machinery based on evidence-based methods of generating and calculate its performance and determine the ratio of failures of the system for watering livestock.

Rezultaty research. In theestablishment of optimal timing

Service vehicles and evaluate their reliability must be considered together with the repair, because it determines the rate of physical depreciation of machinery and hence reliability and durability.

Reliability machines - complex problem. It starts at the design stage machines laid in its production, realized on the stage of operation and is supported by a system of maintenance to end the life of the machine [4, 5].

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aboutstoyiv, productions uabout

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Sectionidvischennya production costs. In addition, in some sectors, such as agriculture and food production, this leads to irreversible loss of yield, milk and other foods.

By modsutness Categorieseobhproper match pivnya

Categoriesandreliability of Appliances it is premature

elimination of the production process, ie,

redchasne cancellation. In order to ensure the task facing agriculture will need to increase production machines is almost totally in the present conditions due to lack of capital and lack of additional investments

reversibles funds in companies.

In the thenand the same time, yakschabout

CategoriesandEven to Stagex desigtion

and production managed to lay and provide the necessary

reliability

machines, the implementation of this potentially high reliability depends on operating conditions and technology, especially the system of maintenance and repair of their money.

Dla onvnoyi Reactivementation potentsiynoyi

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upravlyaty process operation of machines by creating and

optimal use of system maintenance and scientifically grounded doremontnoho, overhaul and full of resources and service life of products. Full implementation of reliability engineering, embedded during the design and production will increase its productivity and thus improve the economic performance of all without additional capital investment and a significant increase in working capital.

All the above techniques to determine reliability as the most important economic category and associate it with a system service and repair optimal lifespan machines
Provideand optimal management of this important part of the quality in operation. Establishing and maintaining a service life of cars - one of the main conditions for increasing production efficiency in a particular
Sectionidpryyemstvi and in industries in general.

Of all the properties of reliability greatest influence on the final results of the economic machinery and equipment has durability and reliability, as their level determines the amount of the cost of capital and current repairs to eliminate failures in the operation of machinery, and hence indicators of economic efficiency of its use.

Andnshi properties of reliability, maintainability and survival, laid mainly in the design phase and significantly affect them in the operation of the machine difficult.

Reliability machines - complex problem. It starts at the design stage machine, with its laid
production, realized on the stage of operation and supported by
a system maintenance to end the life of the machine.

Effectsness of the potential use of product reliability, laid during the design and production, mainly
byis the system of maintenance and repair of equipment and the quality of their implementation. To use the full potential reliability of machines necessary to system maintenance and overhaul resources and service life of the machine have been scientifically substantiated. This will increase the operational reliability of machines and thus their productivity and improve all economic
indicatorand without the use of additional capital investment and a significant increase in working capital.

In studies of domestic and foreign authors most
from-identification question given the overall economic impact assessment of physical and moral deterioration in economic performance of vehicles. This is often not taken into account especially

construktsiyi machines, systems maintenance, and repair cycle structure of optimal service life.

Andstitutionalism different criteria for assessing cost-effectiveness has shown that the most appropriate one for the evaluation of the Sectionidvyschennya quality and reliability of machines is a minimum criterion reduced the total cost of production and operation technology. This is especially true for assessing the reliability of a given technology design and operating conditions.

Management todiynistyu techNickyto eqspluatatsiyi allowancethere is devein system maintenance of optimal doremontnym overhaul resources and machines. These systems can be classified into three areas: the refusal to repair; planned preventive repair and system repair for the state, which are often used in combination with each other.

Andstitutionalism repair existing systems shows that their development in different areas often do not reflect separate accounting costs curtion, repair and removal of failures is not considered riznochasnist costs, and most importantly their use of cars is seen as uncontrollable, whereas in reality all these costs are neubutnymy functions of time.

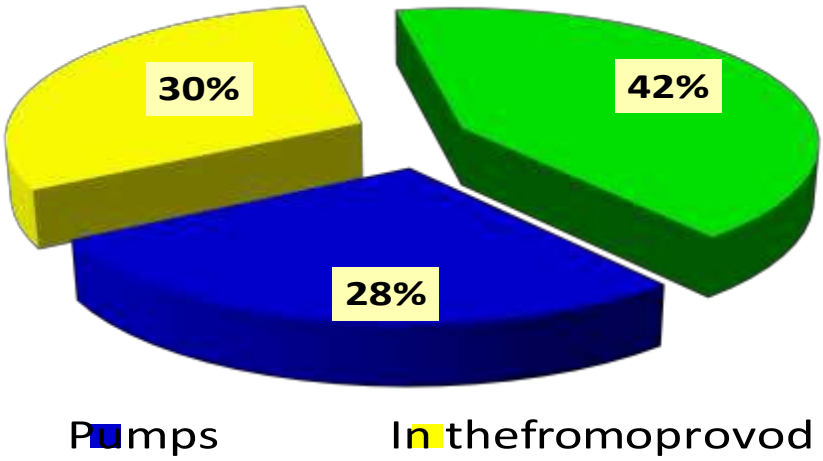
Aboutdriven analysis shows that the annual operating time machines and their operational reliability depend mainly on the conditions and level of use and maintenance, including: quality of operations maintenance qualifications of staff, state of the production base, natural climatic conditions.

BeFaces toSectionlil Categoriesand pichne Categoriesapratsyuof maCategories dob age machine. The highest annual output of machines is usually observed in the second year, and then it gradually decreases from year to year, rising slightly during the next overhaul.

Toslidzhennya dynamics specific reduced costs for major and minor repairs shows that their value increases with increasing number of repair, decreasing immediately following each repair, but this decrease did not reach the value of specific costs relate previous repair. Studies have shown that these costs increase with age and number of machines Dfunding to renovate occurs for two reasons: the aging of the machine and reduce size of overhaul of use. Brighten strong trend growth depending on developments costs Fixedof failures. In addition there are significant costs of downtime. The main units of the system for watering livestock fermax is the water supply systems, including pumping stations,

water pipes. The analysis process equipment systems watering livestock farms and complexes showed (Fig.), Which basically watering system failure associated with failure:

- napuvalok (in 42% of cases);
- thlektrodvyhuniv totoslidok whenof stressesand to thnerhomerezhi impellers and wear pumps (in 28% of cases);
- water supply system due to corrosive wear and physical actions (30%).



Ric. Value of failures on the elements of napuvanya.

In detailin information systems for equipment failure watering livestock farms and kompleksivmozhna obtained from the table. Mass fault systems are drinking pump impellers break. Repair of agricultural enterprises carried out own replacement parts that are out of order, and nodes. Wear water supply is due primarily to the corrosion process. However, the matter and the human factor - for this reason is defrosting system or a break. Plumbing repair carried out by enterprises on their own.

Failures of feeding.

Model, the manufacture r	THermin e Service	Detail, node, uat breaking down	The reason for exit down parts, components	Way removed by
TOJ "Leeto ment en- fromA Bfrom submersib le pumps " ETSV 6-10-140 ETSV 6-6,5-80	2 years	Krylchatka and	Mehanichnyy corrosive wear	FromAmin

Extension Table.

Model, the manufacturer	THermine Service	Detail, knot, leaving the lhell	The reason for the failure of the details	Solution Categoriesespravnosti
Pump HIn the- 7.5			Mehanichnyy	Fromaluchennya
Pump ETSV 5-10-110		Precipice impellers.	and kaboutroziynyy wear	third-party experts Replacement
		Precipice dowels	Mehanichnyy	
			and kaboutroziynyy wear	
Pump Grundfos		Shareektrodvyhun		FromAmin
Pump Speroni	1 year	Shareektrodvyhun		Pemont own
In theodoprovid, drinking bowls		Tmetal edge, plastic. In theodozapirna fittings.	Physical performance. negative temperature. Mehanichnyy	Pemont own forces
		Valves	and kaboutroziynyy wear	
			toTom metal	

Conclusions

Andstitutionalism different criteria for assessing cost-effectiveness has shown that the most appropriate ones for assessing measures to improve the quality and reliability of machines is a minimum criterion reduced the total cost of production and operation technology. This is especially true for assessing the reliability of a given technology design and operating conditions.

Office machinery reliability in operation involves developing systems maintenance of optimal doremontnym overhaul resources and machines. These systems can be classified into three areas: the refusal to repair; planned preventive repair and system repair for the state, which are often used in combination with each other.

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In Article rassmotrenы terms Provision Quality products in the industry selskohozyaystvennoho mashinostroeniya with uchetom scientific obosnovannыh Formation and calculation methods ee indicators and given sootnoshenye otkazov system elements poenyya zhyvotnovodcheskyh on farms.

Kaeration production nadezhnost, bezotkaznost, Durability, otkaz repair.

In paper the terms of providing of quality of products are considered in industry of agricultural engineer taking into account scientifically-reasonable methods of forming and calculation of its indexes and correlation over of refuses of elements of system of giving to drink is brought on stock-raising farms.

Product quality, reliability, dependability, durability, failure, repair.

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PIDVYSCHENNYA DURABILITY OF WORKING PARTS SHVYDKOZNOSHUVALNYH MACHINES by applying discrete coating on the surface FRICTION

M.And. Denisenko, Ph.D.

This article explores the increasing longevity of working parts tillage machines to form samozahostryuvannya effect. Proposed to control the properties of the surface layer of job creation and effect samozahostryuvannya use discrete coverage.