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Sexl posvyaschena question Perform Quality mehanizyrovannyh of technological operations, analysis methods and indicators for determining kachestvennyh s Influence on the Formation and byolohycheskoy "zachetnoy 'productivity.

Trebovaniya plants, Perform Quality mehanizyrovannyh of technological operations, selskohozyaystvennaya machine harvest.

Its paper is devoted to issue of quality of performance mechanized process operations, analysis methods determine quality indicators and their impact on biological and "record" yields.

Requirements plants, quality of mechanized manufacturing operations, agricultural machine harvest.

UDC 631.3: 620.172.21

PORIVNYALNA DESCRIPTION methods of nondestructive testing and diagnosis

SS Karabynosh, Candidate of Sciences AA
tehinchyh Sychevskii, student

The paper is a comparison of basic characteristics of the detection of defects and damage that

with details of agricultural machines, nondestructive testing and diagnostics of machines.

Control, flaw detection methods, holography, interference, detail, reliability level.

Resolution problem. One of the important parts in solving the problem of providing high reliability agricultural machines lies in the development, improvement and introduction into production, repair work, as well as operational methods and means of nondestructive testing, whose effectiveness is determined primarily by their reliability and performance. The economy of Ukraine is extremely acute problem of creating technological support, guidance tools based on modern approaches to extend the life of agricultural machinery and equipment for guaranteed security safeguard their operation.

Existence for this parameter, along with a thorough analysis of operational data should be information about their current technical condition. This information enables the implementation methods of nondestructive testing and technical diagnostics. Application control methods makes it possible to select suitable of products for further processing and use, install and remove the causes of defects. To determine a reasonable resource farm machinery necessary to create a system bezpererption control of their disability.

Analysis recent research. In modern terms nondestructive control with simple operation process turned into a branch of the science of organization control the entire production process. Non-destructive inspection considered [1] as the process of determining compliance indicators of reliability (quality) products specified requirements suitability of their intended use.

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shortcomings of modern methods of nondestructive testing for determining the technical condition of agricultural machines.

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| Results | literature. | Control | even as sti |
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agricultural machinery, their components based on the use of penetrating fields, radiation and substances to obtain the necessary information on their technical condition and readiness for operation. In the business of making or repairing agricultural machinery, nowadays, use the following control methods (non-destructive): magnetic, acoustic, electric transformer, thermal, optical, radiohvylevyy, X-ray, penetrating substances.

In the stanovleno proved that only a comprehensive combination of properties of design, technological, operational and maintenance techniques allows to obtain high-quality products, which is a comprehensive indicator of quality selected materials, quality process implementation, quality components, activities and facilities maintenance with proper operation of equipment. Prevent accidental, sudden failures may only conduct timely strict continuous control elements responsible for product design.

Note that almost all the methods in almost varying degrees make it possible to evaluate the technical condition of the concrete surface of the product or its fragments only with some degree of reliability in the real process. Studies conducted on the basis of a sample of 25 units wide range of parts names that contain characterized by defects tenfold repetition of the experiment.

Needs and modern agricultural production require complex control all surface details or more surfaces, or more details. The results of experimental studies, practical experience and analysis of the literature [2, 3, 4] have shown that the physical and mechanical properties of materials, details of which are made with stochastic nature and are subject to the laws of random phenomena.

Available in detail imperfections and defects makes it possible to assume that even some volumes of work items is heterogeneous and can be evaluated only by the laws of mathematical statistics, probability theory and the appearance of random variables. This allows you to say that for research, practical objectives, it is necessary use non-destructive testing methods that enable to evaluate the technical condition of the complex details combined their different basis. Analysis of the studies revealed that such features have the following NDT methods that have a high probability of defects total: computer holography; Acoustic: reflected; penetrating radiation; holographic; transformer; Magnetic and electric; Other methods give very low probability of detection based on 23 identified defects were found in practice in a wide range of parts for agricultural production.

The condition that limits the specific situation is the presence of defects or group. This range may be reduced in accordance with Real but the obtained values or extended with the need for additional experimental studies.

About driven analysis and experimental literature

study revealed that only use non-destructive testing methods makes it possible to achieve the chosen level of reliability agricultural machines. The implementation of these methods prevents drastically reduce the production of defective products, the number of accidents and create consumer confidence in the high quality of the offered products.

Experimental studies have established and practically confirmed that no specific NDT method in question is not universal, has a limited

about its application. Most of them (the analysis given in the previous sections) can record approximately defect characteristics, without their quantitative values, depth, configuration, size or no records hidden damage.

What, to a certain degree, Categories of existing methods of integrating with existing criteria in developing the use of a control method in determining the level of efficiency in the manufacture of specific parts or restoration of the rational method of cultivation.

Actual solution is the presence of stresses in the underlying layers of the contact surfaces of the components and associated with this boundary state products. The principal feature of new methods of nondestructive testing is the use of modern computerized systems that enable us to explore products, establish their technical condition, accumulate statistically process the information quickly and accurately identify defects, damage, for a long time they identify characteristics, parameters, and more.

Conclusion. In the end, the authors may have gained practical experience obtained preliminary results of theoretical and experimental studies, the ability to complete computerization in combination with systemic integrated approach makes it possible to determine the most relevant and practically valuable upgrades, improvements and new optical methods of NDT and its modern manifestations - electronic speckle interferometry (computer holography).

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In this article shows the characteristic abilities Comparative definitions of major defects and povrezhdenyy, которые ymeyut details of agricultural machines, nerazorytelным control and diagnostics of machines.

Co.ntrol, malfunction, methods, holography, ynterferentsyya detail, nadezhnost, level.

There is resulted comparative description of possibility of exposure of basic defects and damages which have the parts of agricultural machines, by the non-destructive control and diagnostic machinery in paper.

Control, defect's determination, methods, holography, interference, details, reliability, level.

UDC 631,362

MAIN TYPES damaged parts RESHITNYH ZERNODROBAROK

From.A. Morozovskaya, graduate student *

Rozhlyanuto problem of failure of the main working reshitnyh zernodrobarok and their impact on the quality of grinding grain.

Zehrnodrobarka, sieve, millibnyuvalni hammers, fan operation, operation.

Resolutionska problem. Pivnomirne grain refinement improves absorption of nutrients animals, and reducing energy consumption in chewing feed. It is possible to obtain high-quality feed mixture.

Volumein such machines must have high reliability and durability. To identify the factors that cause certain types of failures is necessary to analyze the work of crushers for further deficiencies. In the hammer crusher,

* Naukvyv Head - PhD AI Boyko

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