



Časopis Naučnog društva za pogonske mašine, traktore i održavanje
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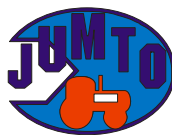
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Poljoprivredni fakultet

Trg Dositeja Obradovića br. 8

Novi Sad, Srbija

Tel.: ++381(0)21 4853 391

Tel/Fax.: ++381(0)21 459 989

e-mail: milanto@polj.uns.ac.rs

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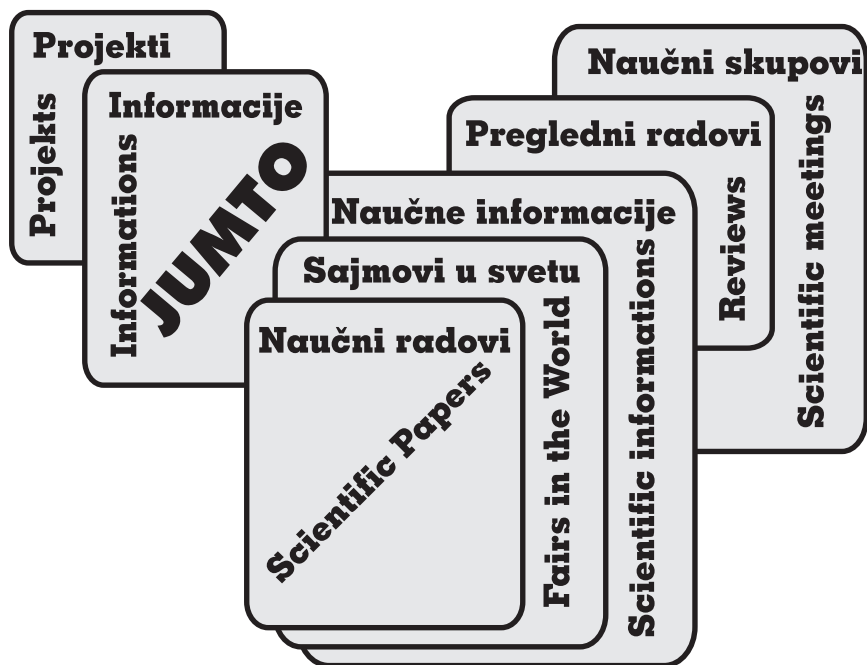
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Scientific paper

ASSESSMENT OF WEAR OF A WORK FACE OF A PLUNGER OF A HOMOGENIZER OF MILK

Pastukhov A.G, Sharaya O.A., Berezhnaya I.Sh.¹

SUMMARY

In article the technique and results of an assessment of wear of a work face of a plunger of a homogenizer of milk is considered. Authors offered a technique of splitting a form of a plunger into characteristic longitudinal and lateral sections on which the mikrometry is executed. During the analysis of results graphic interpretation on a basis by which the form the depth of roughness is established to a worn-out longitudinal surface and polar diagram lateral sections of a plunger is carried out.

Keywords: plunger, wear, micrometry, the depth of roughness, polar diagram.

INTRODUCTION

In agro-industrial complex of Russia there was a differentiated structure of production caused by existence of the enterprises of innovative type providing high technical and technological level of production, and the enterprises which are widely using primitive technologies and manual skills. In this regard the problem of transition to innovative type of development and the organization of production is especially actual for the overworking enterprises and the enterprises making foodstuff. For what it is necessary to realize one of principal directions of a package of measures – modernization of technical base [1]. One of the directions of modernization is increase of operability of farm vehicles and the equipment on the basis of restoration and hardening of details that allows to provide 100% a postrepair resource of cars [2]. Thus, it should be noted that creation of productions for restoration of details demand smaller capital investments, than for production of new spare parts, and in the discarded cars remains to 50% of the details which are subject to restoration [3].

For ensuring operability of the equipment of the overworking dairy enterprises it is necessary to carry out the analysis of structural elements of the equipment for identification of details of the most subject to refusal in use and to estimate possibility of their restoration. For example, in a technological chain of productions of the overworking dairy equipment homogenizers on which technical condition quality of production and its prime cost significantly depends widely are applied. One of the basic structural elements of a homogenizer who is subject to refusal in use, joint "a plunger - sealing" is. Wear of elements of the mentioned joint is shown in loss of the correct geometrical cylindrical form, change of the geometrical sizes in longitudinal and lateral sections of a plunger, distortion of geometry and loss of elasticity of working edges of a

¹Pastukhov A.G, department chair, Dr.Sci.Tech., professor +7-960-627-68-18, E-mail: pastukhov_ag@mail.ru, Sharaya O.A., PhD, professor, +7-9623008944, sharay61@mail.ru, Berezhnaya I.Sh., senior teacher, +7-9511571188, fajzir@yandex.ru, Belgorod state agricultural university named V.Ya. Gorin, Belgorod, Russia

