



DOI: **10.5958/2249-7137.2021.01821.8**

DEVELOPMENT AND USE OF A POROUS FILTER FOR CLEANING HYDRAULIC OIL IN A HYDRAULIC SYSTEM

Dzhuraev Akbar Shavkatovich*

*Assistant at the Navoi State Mining Institute,
UZBEKISTAN

ABSTRACT

In the process of servicing, fine cleaning of the additional working fluid through the filter reduced the contamination of the working fluid by 3-5 times and ensured reliable operation by 2-3 times. The advantages of hydraulic devices over other devices are noted in foreign literature. In a hydraulic system, the source of the working fluid is energy and its purity is very important. In the course of our research, the material that made it possible to effectively filter the working fluid was a filter with a porous medium. It is widely mentioned in the works of G.G. Tumashev and G.V. Golubev. The obtained mixture was immersed in water of 96 0 C . The process of chipping with mixed water begins to occur. The mixture is immersed in water until the chipping process is complete.

KEYWORDS: *Contamination, Porous, Hydraulic, Immersed*

REFERENCES

1. Abduazizov N.A., Aliev T.B. and other IR-spectroscopic analysis of contamination of hydraulic fluid of hydroficated mining machines // Universum: technical sciences. - Moscow, 2019. - No. 8. - S. 35-39. 2.
2. A. N. Azamatovich , Z.A. Shavkatovich , T. Abdumuminovich , A. Khusniddinovich , "Modeling the movement of dusty air flows inside the air filter of the hydraulic system of a mining excavator." International Journal of Grid and Distributed Computing (IJGDC), ISSN: 2005-4262 (print); 2207-6379 (online), NADIA, vol. 14, no . 1, pp. 11-18 March 2021.
3. Abduazizov NA, Muzaffarov A., ToshovYa.B. "A complex of methods for analyzing the working fluid of a hydrostatic power plant for hydraulic mining machines." // International Journal of Advanced Science and Technology. - India, 2020. - Vol . 29. - No. 5. - R. 852-855. (No. 3.Scopus ; No. 41. SCImago , impact factor - SJR 2019: 0.11).

4. Abduazizov N.A., DzhuraevA.Sh. Investigation of the physicochemical composition of pollutants in working fluids operated in the Kyzylkum region // Universum: technical sciences: electron .ncientific . yurn .2021.6 (87). URL: <https://7universum.com/ru/tech/archive/item/11956>
5. Abduazizov N.A., DzhuraevA.Sh., Khoshimov OO, Vakhobova N.A. Analysis of contamination and filtering capacity of working fluids of a hydraulic excavator // Achievements of engineering technologies 2021 No. 1 43-46 p.
6. Abduazizov N.A., Tabulin A.A., Filipova L.G., DzhuraevA.Sh. "Analysis of the influence of the temperature of the working fluid on the performance of hydraulic excavators." // International conference on innovative development of the Zarafshan region: achievements, challenges and prospects Uzbekistan. Navoi 2019 p. 19-24.
7. MardonovaS.Kh., DzhuraevA.Sh. "ANALYSIS OF THE USE OF HYDRAULIC EXCAVATORS IN SEVERE CLIMATIC CONDITIONS" // International Scientific and Practical Conference CCII. Moscow, 2021.214-217.
8. Abduazizov N.A. ZhuraevA.Sh. "Development of a mathematical model of thermal processes in the control loop of a hydraulic unit of a quarry plant." // International Journal of Advanced Research in Science, Engineering and Technology. India. September 2018. Vol . 5, Issue 9, pp- 124-130.
9. Muratov G.G., Yuldoshov H.E., DzhuraevA.Sh. "Requirements for the electric drive of the head of a mining excavator" // Journal of advanced research in the field of technical sciences. No. 8. 2018. st. 80-82
10. Abduazizov N.A., Islomov Z.R. ,Dzhuraev R.U. DzhuraevA.Sh. "Rational design solutions in the development of an air filter for a hydraulic excavator." // Mining Bulletin of Uzbekistan №3 2020.
11. DzhuraevA.Sh., Khaitov F.Z. "ANALYSIS OF METALLUSHKIS CHIPS OF TELLUS 68 HYDRAULIC OIL BY CONDUCTING AN ELECTRIC CURRENT THROUGH IT ." // European Science № 7 (56), 2020. S. st. 26-28.
12. Abduazizov NA ToshovZh. B. Zhuraev A. Sh. "Research of the systems" hydraulic bank-cooler "of hydraulic units of mining hydraulic machines". // EURASIAN UNION UCHENYX (ESU) № 2 (71) / 2020 4-part.
13. AbduazizovNabijonAzamatovichTurdiievSardorjonAbdumuminovichDzhuraev Akbar Shavkatovich . DEVELOPMENT OF MATHEMATICAL MODELS OF HEATING PROCESSES IN THE REGULATING CIRCUIT OF THE HYDRAULIC POWER PLANT OF THE BARE HEADER (44-47) // Eurasian Union Ucheniks . Technicalscience. 2019/06/24; 62 (1): 44-47.