Given the above, it is relevant initially to experimentally explore the law of rotational-oscillatory vibrations of a vibratory machine platform, excited by the ball auto-balancer.

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ADAPTIVE SYSTEM OF TECHNICAL OPERATION OF OPEN PIT TRUCKS

Positions of open-pit mining become stronger, the ratio of technological motor transport, which is component of transport and technological complex of open pits, increases. At the production plants of Ukraine there are used two thousand open pit trucks of BELAZ-HOLDING production, over 300 BELAZ open pit trucks work in the Kryvyi Rih basin, and more than a half of them – the BELAZ-75131 with a loading capacity of 110-136 t. For the last three years the equipment fleet increased by more than 80 units.

Deepening of workings worsens mining conditions, raises operational loadings, reduces reliability of the equipment and efficiency of transportation. Reliability of the system of

technological motor transport (STMT) of an open pit is key indicator as for cost-effective control of open pit trucks operation, and for all pit in general.

Long and reliable work of open pit trucks is possible on condition of systematic and high-quality technical servicing and repair (TSR) therefore justification of parameters of functioning of technological motor transport of deep open pits, which will allow to lower costs of technical operation of open pit trucks, is relevant scientific task.

The purpose of the real researches is increase in efficiency of operation of technological motor transport of deep open pits by use of reasonable parameters of technical servicing and repair.

The problem of improvement of the TSR system belongs to planning and development of methods of control of technical servicing and repair of the rolling stock, optimization by criterion of minimization of the given costs of service "transportation of mined rock".

Object of researches are processes of technical operation of industrial technological motor transport of deep open pits, and the subject – interrelation of parameters of technical servicing and repair and technical and economic indicators of technological motor transport of deep open pits.

As a result of researches for the first time there was developed complex mathematical model of the BELAZ open pit trucks operation, which on the basis of the TSR operating structure unites models of resource and technological states, flow of events, spaces of influences, transitions.

The model allows to define the place and condition of cars in processes of work and technical operation, to determine probabilities of their states in the dynamic and set modes for various levels of the TSR organization.

There was synthesized mathematical model of adaptive steering of the system of technological motor transport of deep open pit on the basis of economic criterion as extreme task with the restrictions connected with technological conditions of STMT.

Optimum control actions are calculated in the form of intensity of planned impacts of TSR on open pit trucks and intensity of transitions from conditions of planned technical servicing, repairs and maintenance of the car to condition of work.

The technical and economic model of optimization of systems of technological motor transport of deep open pits is improved due to addition of the third dimension in the form of shaft of probability of work condition which has united readiness of cars, the TSR complex parameter and labor input that has allowed to receive the surface of influence and trajectory of optimum technical operation of open pit trucks and STMT in general.

The algorithm and technique of dynamic correcting of adaptive system of technical operation of BELAZ open pit trucks at the expense of the synthesized control, which allows to configure reasonably settings of technical servicing and repair of technological motor transport of deep open pits, adapting for the concrete enterprise for criterion of minimum of labor input of technical operation, have gained further development.

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AMELIORATION EN QUALITE DE LA PRODUCTION BAUXITIQUE DES GISEMENTS DE LA COMPAGNIE DES BAUXITES DE GUINEE (CBG), REPUBLIQUE DE GUINEE

La nature a doté le sous-sol guinéen d'immenses ressources minières jusqu'a présent exploitées en partie. Parmi ces ressources on peut citer: la bauxite, le fer, l'or, le diamant et d'autres. La bauxite occupe une place de choix à cause de ses immenses réserves exploitables suivants les normes technologiques actuelles. Il est établie qu'elle détiendrait près de deux tiers (2/3) des réserves mondiales prospectées.