

подчиняется нормальному закону (закону распределения Гаусса).

Важную роль при обработке результатов наблюдений играет проверка статистической гипотезы о нормальности распределения полученных результатов.

Имеющаяся информация позволяет выявить зависимость количества механических примесей от наработки.

Прогностическая модель, которая основана на статистических результатах вибродиагностики и спектрального анализа примесей в работающем масле, дает возможность с высокой достоверностью прогнозировать момент перехода техники в неисправное состояние, эффективнее планировать ремонтные работы, исключить возможность появления аварийных ситуаций.

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GROUND OF PARAMETERS OF FRAME-ANCHOR LINING FOR SUPPORT OF THE PREPARATORY WORKING OF DEEP MINES

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It is experimentally set in the conditions of mine of «Dobropol'skaya», that erection of anchors with a break in time between the coulisse of breed and strengthening of frame lining anchors, not exceeding 27 hours, allows to stunt a growth of ZDR from a contour deep into massif. At a break in time of 27-54 hours providing integrity of the shell clamped anchors is impossible, however much displacements of breeds of roof diminish 1,3 time as compared to working, frame lining

fastened only. Setting of anchors with a break in time, exceeding 54 hour, beside the purpose, as displacements of breeds of roof become practically the same, as well as in working with frame lining.

Dependence is analytically got for determination of break in time between the coulisse of breed in a coalface and setting of anchors. A mathematical model, presented as a multi-layered, spherical shell from transversally isotropic layers, is developed, and dependences, describing a change TDS of the system «frame-shell from clamped anchors breeds-massif, are got». A model takes into account the degree of realization of geomechanical processes, произошедших in an massif in the moment of strengthening of frame lining anchors, and also their development in time.

Developed and patented methods of increase of stability of working with combined lining on the basis of anchor, providing the decline of cost of support of working in 2-3 times.

The method of calculation of parameters of frame-anchor constructions of lining is developed, taking into account the degree of realization of geomechanical processes in a containing massif, allowing differentiated to define the parameters of lining and provide the safe and safe state of working during all term of their service.

Mine tests and introduction of the offered recommendations on fastening of the preparatory working combined lining on the mine of «Dobropol'skaya» allowed to provide their protracted stability and get an economic effect in size of 4,1 million Uah due to diminishing of expenses on fastening, to confirm the association of «Dobropol'eugol'» standard of enterprise [STE (02070826)(26319481):2010].