

ОБОСНОВАНИЕ КОМПЬЮТЕРНЫХ МОДЕЛЕЙ ОРГАНОВ НАМОТКИ И РАСЧЕТНЫХ НАГРУЗОК БАРАБАНОВ ШАХТНЫХ ПОДЪЕМНЫХ МАШИН

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Mine winders produced by NKMZ are losing their competitiveness the foreign analogues. The main feature which cause problems are longevity of the mine winders and their steel intensity. The improvement of these indices will result in raise of competitiveness of Ukrainian equipment. Factors which can influence the named feature is loading on drum shell ring calculation of computer modeling. One of the factors which influences the loading of drum is weakening of pull in the winds of rope due to deformation of shell ring while winding the rope on a drum. The solid computer model of drum mine winder was built using SolidWorks software. The modeled loading of winded rope winds pressure on drum shell ring is designed taking into account the coefficient of weakening, brake loading of drum, co-operation of the winded and winded up ropes with a drum, and the own weight of the winded rope. Configurations of reinforcement of shell ring of drums were also investigated.