

“KNOW-HOW” of the Novokuznetsk scientists

In January 2000 on the training ground of the “Hydro-coal” the tests of the unique complex of the mechanical people delivering and loads on the inclined and horizontal workings till the sinking and clearing faces were passed. In an every coalmine there always was a problem for miners to get to their working places and to deliver loads. Specially equipped rail routes are very dangerous along which there is the aid of the winch where trams and truck move. Position belt conveyers do not save which use by miners try to reach the face with the risk for the life. Cable-seat roads are also unsafe and deficient. In a word, there is no reliable transport for the people delivering and loads to the face yet. The solving of this problem was undertaken by young scientist Oleg Atrushkevich. The general director of the “Hydro-coal”, the doctor of Technical Sciences instead of the customary rail routes using in the underground workings offered the linear fixtures of the rake conveyers, where boards were put on polyurethane resin and rubber. It has high properties frictions. Truck is placed on it. A track has runners which are made from polisher -tan rubber instead of the wheels. You can comfortably set in this underground trolley the whole brigade of miners and they peacefully get the face.

Thus it is possible to supply the necessary loads for work. It doesn't matter, if a rope is broken suddenly. The polisher -tan rubbery runners of the truck that are sliding on surfaces will brake and stop immediately.

This development of the young scientist -hydro miner became the completing link before in the complex of the new hydraulic technology in coalmining. Now the miners have all terms that will help them in the coalmining with the highest productivity and the smallest labor inputs. The commercial tests of the technology in the “Anzherskaya-Southern- experimental ” coalmining enterprise show that it is possible to bring coalmining down to 400 and more than tons a month per a worker , but the prime cost of the ton does not exceed 70 rubles.

Furthermore, this technology makes it possible to dewater coal in the face and to enrich it and to put out down the surface, passing the concentrating plant in the form of concentrate. Thus, hydro-miners excluded million and millions tons of the solid, raised up with coal, and they made the invaluable contribution to the environment protection.

The new technology provides one additional important condition that is especially valuable for the large unprofitable coalmines, many of which are closed already, but where still lie untouched the big reserves of most valuable energy and coking coals. They are located in the complex mining and geological conditions and in the abrupt layers. The proposed by scientists technology supposes the building of it in closed new coalmines with the volume of 600-800 thousand tons of coal per year.

This technology has been already tested in 9 coalmining enterprises of Kuzbass, including “Kiselevskaya” coalmining enterprise. But for the “Anzherskaya-Southern- experimental” coal mine scientists have been preparing to test the manless mechanical-hydraulic technology of coalmining with the new types of transport systems, including the mechanical- delivering complex for people and loads that has been tested by "Hydrocoal".

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