

Hydro miners laid the way to the Baltic region

The order was entered in the All-Russian scientific- researching and designing- construction institute "Hydrocoal" from Kaliningrad city. Baltic coal company requests to prepare and to supply a crushing and screening machine. Knowing about that the Russian scientific center in the Kuzbass is occupied by the development of the new technologies at the point of hydraulic coal mining, so the order from Kaliningrad can seem by uncommon from the first sight. The new technologies in the coalmining and a crushing and screening machine look as they are too distant from each other. But, it occurs that there is nothing uncommon here. In the "Hydrocoal" institute they can much more. The general director of the scientific foundation, the doctor of technical sciences, Professor Arkady Atrushkevich tells:

- Saying frankly, today we must not be requested not about what we can do, but about what we cannot do. At first it was not from a good life. Everywhere scientific- researching and construction- designing institutes without government subsidy dissolved and became bankrupt. This fate waited us. We used not the way of consumption, but creation. Having no any ruble of government subsidy, we not only develop the new technologies of hydraulic coalmining, but we also build strokes, we produce the remotely guided crushing and screening machines, we also adjust unique wheel less underground transport, we propose to the miners contemporary mining techniques, equipment, with the help of that they attain a high productivity of labor of the coal low prime cost. The governor of the Kuzbass Aman GumirovichTuleev named our developments "breakthrough". He recently was there during the opening of a new hydro-mine "Anzherskaya-southern" and he stated after that now the concept "negative coal districts" but "area" had not be used.

The main secret of the "Hydrocoal" institute is in the survivability.

Therefore there is nothing special in the fact that the Baltic coal company is reversed precisely here for the scientists- hydrominers will design and mount a crushing and screening machine. Today it is completely prepared "to work and waits sending in distant Kaliningrad. Patent at the point of its development obtained by scientists Sergey Fomichev, Alexander Bobinov, Oleg Atrushevich, Victor Komarov, Vladimir Mitenev.

Crushing and screening machines, in essence of foreign production, are widely used in the coalmines and the open- casts, in the ports and the railway stations, on the large coal dumps. The fact is that coal is supplied to these objects as run-of-mine, i.e., by the pieces of different coarseness. It's impossible to use it in this form in the boiler rooms and t the thermal power plants - their furnaces are adapted for combusting the specific coal fractions . A consumer usually orders such a type, which can be flattened without the additional processing. Crushing

and screening machines are used to sort out coal of customers on its requirements; however, the existing machines do not completely manage this task. They have many deficiencies. They are energy-consuming; in the strong frost impregnating tapes can freeze through it and be stopped. It is necessary to clean by hand them, and to put it for the repair. During the rain coal creeps down the inclination of a belt and falls down the floor. But there it is needed to take it by hand using a shovel. There are some other design shortages in these machines. For example, the receiving window is a just to load coal there is possible using only dump-trucks.

The crushing- distributing complex proposed by scientists -hydro miners is deprived of these deficiencies. The first model was tested in the cut "Listvyanskiy". The best machine, scientists say, is very difficult to devise. The second model was constructed in the cut "Taldinskiy-northern". The result of the work was the same as in the first mining enterprise. Light, open, modular, sectional complex consists of frame constructions, where are mounted the feeder-crusher, the system of the coal and the supplying classes and the rake conveyers. It's easy to mount it in any area. Now this machine processes to 320 tons of coal and even more. The pile has the height is about of fifteen meters. Other machines choke coal. The large part of it is converted beside the dust. This machine accurately breaks down the large pieces of coal to the necessary conditions; a special triradial scraping conveying machine with the slit measuring hoppers puts out three classes of fuel. It is capable to work during the temperature of - 45 till + 50 degrees. It is possible to place it in the closed rooms due to the contrast of existing machines. It perfectly works even in the rain. Only one person works on this machine. Such a machine soon will be submerged in the railroad cars and it will be sent in the Kaliningrad.

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