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SUEK has commissioned a complex of ventilation facilities at the Kirov mine in Kuzbass. The total cost of the facilities is 1.6 billion roubles (25.5 million dollars).

The Kirov mine's future is directly related to Block No. 4. Commercial reserves of coal on this site are approximately 30 million tonnes. Their development started this year, while completion is planned for 2027.

For more reliable ventilation of mines and power supply to the production unit, a complex of necessary process facilities has been constructed. It includes a vertical ventilating shaft three metres in diameter drilled to a depth of 310 metres.

In order to supply air for the purpose of mine ventilation, a 2x2 dAL 30-11000 fan unit developed by Corfman (CFT, Germany) is used. This unit has a modular design allowing for, among other things, quick repairs.

The use of a Damel electric motor (Poland), together with a frequency converter, contributes to a smooth speed adjustment and, accordingly, air supply control. This makes it possible to ensure the most efficient mine ventilation in combination with other fan units.

For the purpose of heat supply to the heating room of the blower unit building during the cold season, a boiler house with four energy-efficient KV-V-7.56 boilers produced by ProEnergMash (Barnaul, Russia) was built. The boiler house has the heating capacity of 30.24 MW and is fully automated; all operating parameters are sent to the operator's control panel used to control all process procedures.

35/6/6 Kirov-Novaya substation designed to receive, convert and distribute electricity over surface buildings, structures and units is another element of the mine ventilation complex. The substation capacity is sufficient to supply electricity to underground distribution points (6 kV) for mining operations.

'The commissioning of this complex enables the mine team to mine coal efficiently and, most importantly, safely,' Yevgeny Yutyaev, General Director of SUEK-Kuzbass, says. 'In general, air safety issues are always the company's priority. Along with the introduction of a state-of-the-art fan unit, new gas-drainage methods such as hydraulic fracturing and hydraulic layering of the coal seam are being successfully introduced. All in all, it can significantly improve the safety of underground coal mining.'