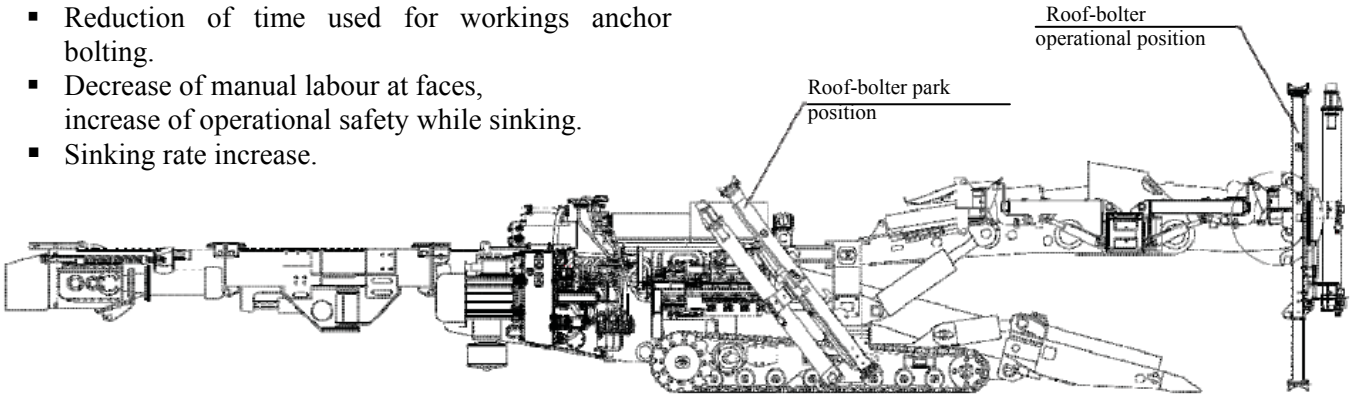
Technical characteristics

Sinking equipment.
Roadheader П110-01 with roof-bolter

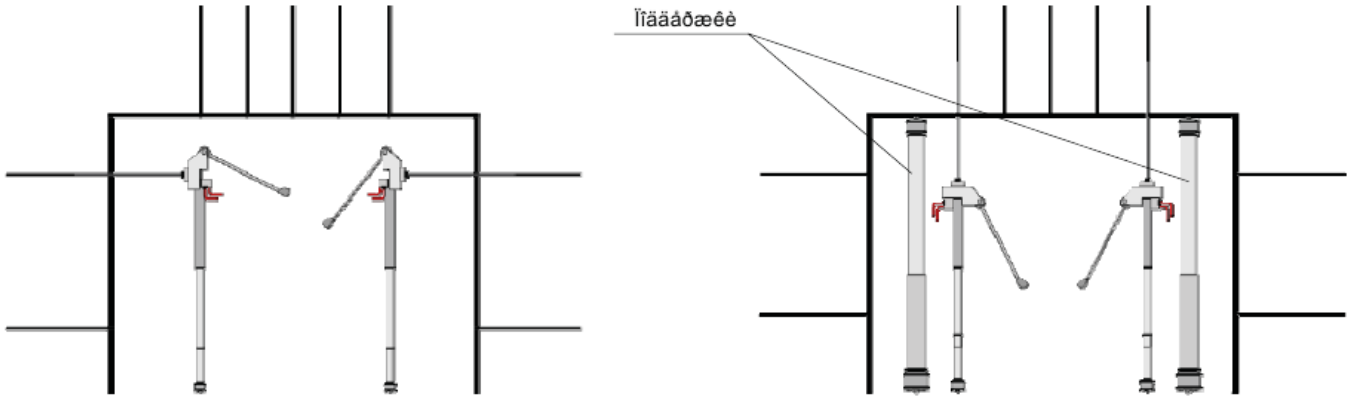
One of the most promising areas in the mining industry - anchor bolting, is becoming more widespread. Mining workings are fastened with arch support in combination with anchoring, which allows not only to increase the pace of preparatory work, but also significantly reduce the cost of bolting and workings maintaining. In this regard, it became necessary to create the affordable system for mechanized and convenient construction of anchor bolting in drifting faces. The joint work of NKMZ specialists and the German company "Deilmann-Haniel Mining Systems" allows the mine workers to offer the roadheader П110-01 equipped with an ABE type roof-bolter.

The roof-bolter is powered by the roadheader hydraulic system. The provision is made for both rotary and percussive-rotary drilling by replacing the drilling heads. With the help of telescopic manipulator located on the roadheader boom, a drill carriage with the anchor jack can easily be moved to the section of the working face. Having set to the operational position, the carriage is strutted off between the roof and the soil by means of the hydraulic jack and drilling is started. After the anchor hole is drilled, the drill rod is easily removed, the anchor is inserted into the drilling motor and screwing into the drilled hole. The time of one anchor erection with smooth-running work and good skills of the maintenance staff is about 4 minutes. For drilling and one anchor row erection, no more than four permutations of the anchor jack are required. At the end of the anchor works, the drill carriage is transferred to the park position on the side of the roadheader or simply strutted off between the roof and the soil aside on the roadheader outside the working area.

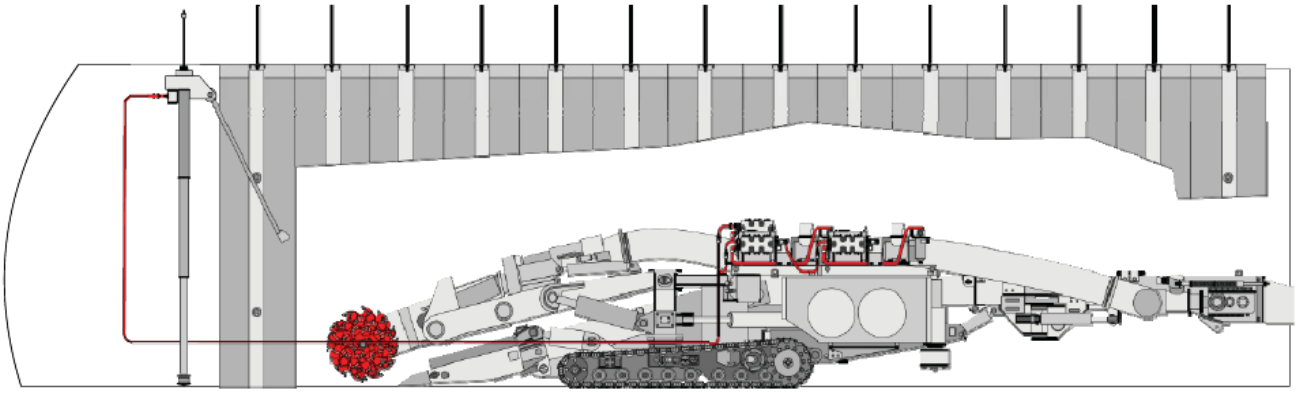
- Reduction of time used for workings anchor bolting.
- Decrease of manual labour at faces, increase of operational safety while sinking.
- Sinking rate increase.



Roadheading with anchor bolting using the hinged ABE roof-bolter manufactured by "Deilmann-Haniel Mining Systems" driven by the roadheader hydraulic system.



Roadheading with anchor bolting using manual
roof-bolters driven by the roadheader hydraulic system



Roadheading with anchor bolting using the hinged
roof-bolter driven by the roadheader hydraulic system