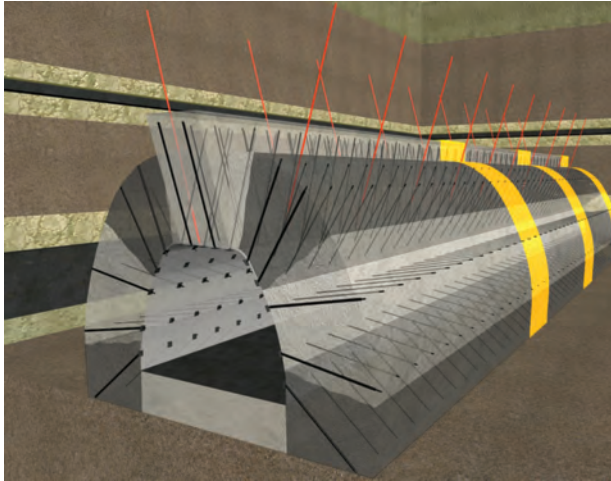
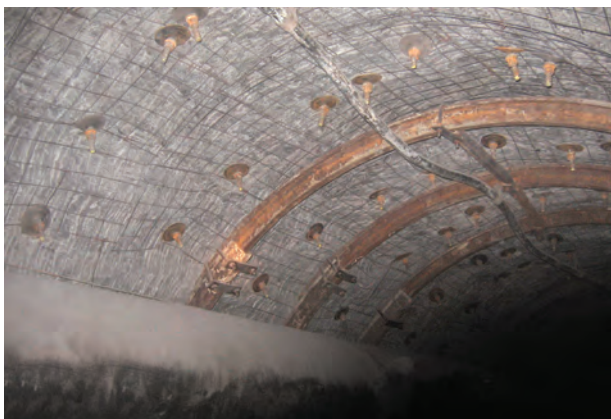


TECHNOLOGY FOR ROOF-BOLTING SUPPORT OF MINE ROADWAYS, INDUSTRIAL AND CIVIL ENGINEERING UNDERGROUND AND SURFACE FACILITIES



Roof-bolting support scheme



Roadways with roof bolting (upper) and frame (lower) supports

Areas of Application

The technology is to be used for implementing new resource-saving supports in the mine roadways while building different underground and surface facilities to radically improve stability, reliability, and safety of their structure and operation and to significantly cut the costs for their protection and maintenance

Specification

Mine cross section, m ²	9–30
Rock strength, MPa	8–90
Metal anchors:	
diameter, mm	22–28
length, mm	1500–3000
Cable anchors,	
length, mm	4000–8000
	and more, if needed

Advantages

Implementation of the advanced roof-bolting supports in mine roadways speeds up 1.4–2 times the period of roadway construction and reduces 1.5–3 times the costs of roadway drivage and repair in comparison with conventional frame supports that significantly increase the coal cost

Stage of Development.

Suggestions for Commercialization

IRL8, TRL8

Upon request, geotechnical survey of mine roadway, underground and surface facilities is carried out; roof-bolting supports are designed; and recommendations on their assembly and installation as well as personnel training are provided

IPR Protection

IPR1, IPR2, IPR3

Contact Information

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