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GEOTEHČNIKA STABILIZACIJA RASTRESITOG SVODA

Sažetak:

Problemi koji su izraženi u jamama uglja BiH, krovinski prazni prostori, restresiti dijelovi iznad podgrade, narušeni bočni dijelovi podzemnih prostorija potakao je da se adekvatno iznađe efektivan metod za stabilizaciju podzemnih hodnika.

Prazni prostori su izvori upala uglja, velik gubitak energije prilikom provjetravanja, otvoren prolaz podzemnim vodama koje u kontaktu sa drugom radnom sredinom stvaraju stalne probleme bujanja. Opit je izvršen u podzemnom rudniku Đurđevik na lokacijama koje su dozvoljavale da se kvalitetno u praksi izvede primjena novih tehnologija na bazi poliuretana i epoksidnih smola. Rad opservira konkretnu primjenu na bazi pripreme, primjena, monitoring, a potom u funkciji vremena predstavlja rezultate istraživanja.

Shodno navedenom može se istaći da se ovaj aplikativni metod u geotehničkom smislu je primjenjiv

na druge uslove kako u podzemnim prostorijama tako i kod rješavanja klizišta, dubokih temeljenja, sanacije mostova i drugo.

Ključne riječi:

stabilizacija, rastresiti, poliuretani, epoksismole, svod, monitoring, geotehnika

STABILIZATION OF GEOTECHNICAL PARAMETERS OF UNBOUND SOIL IN THE UNDERGROUND MINE ROOF

Summary:

The overlying empty spaces in the underground mines roof, unbound soil situated above the mining support and weaken side walls in the underground mine rooms, are the problems that the underground mines in Bosnia and Herzegovina are facing with. These above listed problems induced the research for proper method required for effective stabilization of underground tunnels. Empty spaces are the sources of coal ignition. They cause huge energy loss during ventilation process. In addition, the underground water flow and its contact with another working environment in mine is a constant problem and cause an increase of soil volume.

An experiment has been carried out in the Đurđevik underground mine at locations suitable for practical application of new technologies based on polyurethane and epoxy resins usage. The paper observes application of technologies in-situ, based on preparation, implementation, monitoring and presentation of the research results as a function of time.

Based on the above mentioned, besides in the underground mines, this method, in its geotechnical meaning, may be applied on landslides, deep foundations, bridges rehabilitation, etc.

Key words:

stabilization, loose (unbound soil), polyurethanes, epoxy resins, vault, monitoring, geotechnics

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