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Ermedin Halilbegović[1]
Nadir Halilbegović[2]

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ISKOP STIJENSKE MASE U TUNELU ZENICA

Sažetak:

U ovom radu se daje osvrt na iskop stijenske mase u tunelu Zenica na autopitu koridora Vc. Tehnologija izgradnje tunela obuhvata sledeće podzemne radove: iskop tunela, radovi na podgrađivanju (primarna podgrada) te izvedbi sekundarne obloge tunela. Najvažnije obilježje za odabir tehnologije građenja je geologija stijenske mase kroz koju tunel prolazi. Na tunelu Zenica je primjenjena kombinovana tehnologija iskopa: mašinskim putem i miniranjem („drill and blast technique“) i bazirana na NATM - Nova Austrijska Tunelska Metoda. Iskop tunela Zenica je vršen u veoma složenim geološko-geotehničkim uslovima.Obzirom da se radi o flišnim sedimentima tektonika je bila jako izražena sa stalnim smjenama tvrdih i mekih stijena te velikim količinama podzemne vode. Iskop tunela je vršen u više faza i u punom profilu u zavisnosti od kvaliteta stijenske mase uz istovremeno osiguranje iskopa primarnom podgradom. Svakodnevno je vršeno inženjerskogeološko kartiranje stijenske mase čela iskopa. Za klasifikaciju stijenske mase primjenjena je geomehanička klasifikacija - RMR. Iskop tunela Zenica je izveden u stijenskoj masi III, IV i V kategorije po RMR-u.Ovaj dio prve strane je rezerviran za sažetak na južnoslavenskim jezicima. Stil Sažetak. U fusnoti navedite podatke o autoru (i koautorima).

Ključne riječi:

Tunel, iskop, stijenska masa, RMR klasifikacija, NATM metoda.

EXCAVATION OF ROCK MASS IN THE ZENICA TUNNEL

Summary:

This paper gives an overview of the excavation of rock mass in the Zenica tunnel on the highway of Corridor Vc. The technology of tunnel construction includes the following underground works: tunnel excavation, substructure works (primary support) and construction of the secondary lining of the tunnel. The most important feature for the selection of construction technology is the geology of the rock mass through which the tunnel passes.

The combined excavation technology was applied at the Zenica tunnel: by machine and blasting ("drill and blast technique") and based on NATM - New Austrian Tunnel Method. The excavation of the Zenica tunnel was performed in very complex geological and geotechnical conditions.

Since these are flysch sediments, tectonics was very pronounced with constant shifts of hard and soft rocks and large amounts of groundwater. The excavation of the tunnel was performed in several phases and in full profile, depending on the quality of the rock mass, while ensuring the excavation with a primary support. Engineering geological mapping of the rock mass of the excavation face was performed daily. Geomechanical classification - RMR was applied for the classification of rock mass. The excavation of the Zenica tunnel was performed in the rock mass of III, IV and V categories according to RMR.

Key words:

Tunnel, excavation, rock mass, RMR classification, NATM method.

[1] Prof.dr. Ermedin Halilbegović, Internacionalni Univerzitet Travnik u Travniku, ehalilbegovic@yahoo.com

[2] Mr.sci. Nadir Halilbegović, ing.građ., International Burch University in Sarajevo, nadir_halilbegovic@live.com