

Abstract

The Blanka tunnel has two boring sections: Brusnice tunnel and Královská obora tunnel. Both tunnels were boring in difficult geological conditions, but the geology conditions of these tunnels are not same. Also they had not the same hazards during boring. There was used a spectrum of different technical works with hazard reduction purpose and safety process of boring. There were three serious accidents, which everyone made a creater on the surface, but they have not the same causes.

This text has a task to describe a geological survey before and during the boring of both tunnels. How other reasons affected the process of boring? How the tunnels were bored? What events preceded the everyone of three major failure?

This text does not deal with economical things of boring and effects of specific personal influence on the process of boring.

Key words

Tunnel, excavation, Blanka, Brusnice, Letná, Stromovka park, Vltava river, underground water, geology, ordovik, New Austrian Tunnelling method, pilot tunnel, calotte, bench, bottom, arche, bolt, lining, grouting, collapse of ceiling, failure, tube, shale, quartzite, soil, loess, ballast, clay