

Abstract

The Thesis deals with the structural analysis of the Prackovice exploration gallery in the České středohoří Mountains (Mittelgebirge) in North Bohemia. The gallery has been built in the axis of the future Prackovice tunnels on the D8 motorway connecting Prague with Dresden (Germany). The analysis is based on structural measurements carried out from the faces of the exploration gallery. The analysis enabled me to estimate the possible failure mechanism of the jointed rock mass around the unsupported excavation. A probable shape and size of the technological overbreak was determined and the most critical parts of the tunnel were identified. From the results of the structural analysis we suggested a suitable support of the Prackovice tunnels.