

Thermal load of the final lining of traffic tunnels

Lukas Duris¹, Josef Aldorf¹ and Jiri Geryk²

¹Technical University of Ostrava, Ludvika Podeste 1875/17, Ostrava 70833, Czech Republic

²Inset Ltd., Rudna 21, Ostrava 70030, Czech Republic

E-mail: lukas.duris@vsb.cz

Abstract. The final lining of mined tunnels using NATM is connected with the need to ensure long-term durability of the construction. The interaction between the secondary lining and surrounding rock mass is ensured by contact with the primary lining. Static load depends already on the interaction between tunnel lining and rock mass. Loading is given by geotechnical conditions, the size of the excavation, construction progress and very important is weather conditions. In this paper presents the results of long-term temperature measurements of the final lining of traffic tunnel. Measurement at selected tunnel pass over ten years. The monitoring results should be available for future design of the final lining of tunnel construction.