



Rehabilitation of an underground structure could be described as its restoration to good condition, operation, or capacity. Rehabilitation works take place if during maintenance inspections it is determined the functional, structural or esthetic levels of an underground construction are below a certain threshold which will depend on the importance of the structure, the country and the consequence of the damages in the tunnel.

Rehabilitation can be also necessary due to a rise of the standard exigencies that make the former acceptable structure lag behind the new demands, so that it needs an improvement in its characteristics (e.g., new more strict safety or environmental regulations).

Rehabilitation works can be done in order to solve structural problems, deficient water tightness, increase of the space inside the tunnel, changes in the service and use, general modernization, etc.

These rehabilitation works normally must be done while the operation of the tunnel is maintained at least partially, becoming a challenging task that asks for a precise planning and careful operation, very specialized teams and optimized logistics.