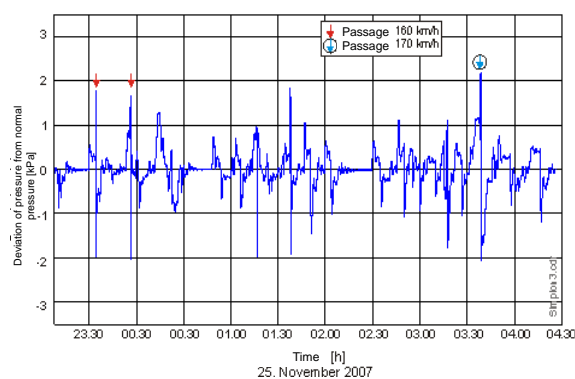




Check of the self-rescue measures in an existing tunnel



Aerodynamic acceptance measurements (1D ultrasound flow measurement system for non-contact measurement of the flow speed)



Proof of compliance of the maximum pressure fluctuations after a speed increase

New or adapted norms and guidelines lead to changing requirements for tunnel constructions. Changes of the usage requirements can lead to new performance requirements. With the check of the functional and safety requirements of existing tunnels by HBI, the safety level is determined and the need for action and the measures to be realized are demonstrated.

Our services

In c. 200 tunnel renovations and c. 400 new tunnel plans, HBI has acquired special competence in the evaluation of the safety engineering of tunnel constructions.

For safety reviews, we offer comprehensive consultancy services:

- Check of compliance with specific norms and guidelines (safety requirements of existing tunnels according to BAV, AB-EBV, SIA Tunnel Norm, RABT, EBA, TST)
- Check and assessment of self-rescue measures
- Proposals for the improvement or achievement of the norm requirements
- Review in case of changes of use (e.g. increase of speed, rolling stock)
- Review of construction and equipment and assessment of their condition
- Review of control components
- Review of the escape and rescue concepts
- Planning, execution coordination and acceptance of measures

Your benefit

- We offer a comprehensive interdisciplinary safety review.
- We establish well-founded expert opinions for approval procedures.
- We ensure that the measures to be taken are economically acceptable and feasible.