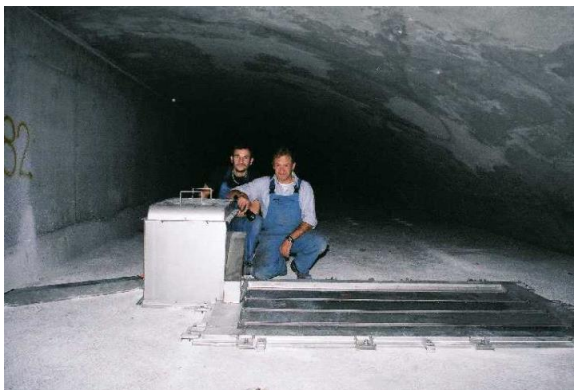*Mounting of an axial fan*

Installation and supply of jet fans

Mounting of a damper

HBI Haerter Consulting Engineers plans and implements an optimum ventilation system for your road tunnel, taking into account the costs for construction, operation and maintenance as well as the requirements for all operation modes. We solve your planning tasks with our competent team of engineers and physicists. HBI's long-standing experience is based on more than 800 reference projects.

Our services

- Estimation of traffic density and determination of the relevant traffic conditions for ventilation
- Prediction of pollution in the tunnel depending on the traffic, and calculation of the required fresh air
- Recommendation of the optimum ventilation concept considering the most important criteria such as costs for construction, operation and maintenance and safety in the case of fire
- Call for tender for fans and other components such as silencers, dampers, turning vanes etc.
- Elaboration of concepts for optimisation of the control of the ventilation plant with regard to power demands
- Site supervision, acceptance tests and start of operation
- Consideration of dynamic aspects in the design and control of the ventilation system
- Concepts for demanding benefits projects regarding the ventilation such as projects for complex tunnel systems with underground crossroads and entrances and exits

Your benefits

- We contribute to your project from the preliminary design up to commissioning. You will receive all required services from one source. Unnecessary interfaces are avoided and you are assured that practical concepts are developed and implemented.
- Extra services such as the simulation of pollution dispersion from tunnel portals or three-dimensional simulations of fires in tunnels can also be provided by HBI Haerter Consulting Engineers.
- Because of our membership in the PIARC working committees on "Ventilation and Emissions" and "Fire and Fume Control" it is guaranteed that our services conform to state-of-the-art knowledge.