

Tunnel & Metro

Fire safety consultancy and design

- for various metro stations (e.g. Alexanderplatz) of the public transport company of Berlin (BVG)
- Planning of a water-based fire-fighting system of an inner-city car tunnel (Tunnel Bahndamm, Cologne and Hugh L. Carey Tunnel/N.Y.)
- for the fire protection equipment of ultra-high-speed trains and of tunnel tubes and stations (Hyperloop)
- Expert statement on a tender process for a semi stationary foam extinguishing system for the tunnel Grouft-Stafelter Luxemburg
- RAMS study for Eurotunnel's SAFE fire-fighting system
- Design evaluation of fixed fire-fighting system for Abu Dhabi tunnel
- Assessment of CFD simulation accuracy with fixed fire-fighting systems in road tunnels
- Evaluation of safety concept for Budapest M4 Metro
- Expert statement and fire tests to assess the performance of a water mist system as compensation for platform screen doors (PINTSCH BAMAG Antriebs- und Verkehrstechnik GmbH)
- Expert statement about usability of PVC foil as advertising media in underground stations of Munich metro

Smoke & fire tests

- Determination of the critical air velocity and the resulting back-layering effects of smoke gases in a scaled model tunnel with and without a water-based fire-fighting system in order to develop measurement data for a validation of the FDS software and as reference of the FDS guideline by a third party for a renowned US based professional services firm in engineering.
- Smoke and fire tests for the approval of detection system in a station concourse of S21
- Deluge and ventilation system tests in Washington street tunnel in Seattle
- Fire tests for water mist systems for Eurotunnel's SAFE Stations
- Fire test program for fixed fire-fighting systems for Highways Agency
- Fire test program for fixed fire-fighting systems for Tunnel Mont Blanc
- Fire test program for fixed fire-fighting systems for FOGTEC

Simulations & calculations

- CFD and evacuation simulation for the approval for smoke extraction and evacuation measures of various metro stations of the public transport company of Berlin (BVG)
- Various CFD simulations as an approval for the smoke extraction and evacuation concepts of according to EBA for Metro stations in Berlin (Krebs+Kiefer Service GmbH)
- CFD simulations for water based fixed firefighting system in underground station S21 (Deutsche Bahn)

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