

RAIL SYSTEMS

**ACTIVE FIRE PROTECTION** 



### **ABOUT FOGTEC**

- Owner-managed, founded 1997
- 180 people from more than 20 countries, 40 Mio. €
- Headquarter Cologne
- Sites in Mumbai, Shanghai, Vienna, Coquelles
- Experts in Research, Development and Engineering of complex fire protection solutions
- Full portfolio incl. engineering services, validation and testing
- Market leader in rolling stock application and underground infrastructures









## **OUR BUSINESS UNITS**

#### **FIXED SYSTEMS**



High Pressure Water Mist Systems offer a optimized protection for buildings, machines and industrial applications

### RAIL SYSTEMS



Fire detection and fire fighting systems specially developed for rolling stock applications.

#### **TUNNEL SYSTEMS**



Automatic fire fighting systems in tunnels increase the level of safety and availability considerably

#### NEW ENERGY CARRIERS



Energy storage systems, production areas for electric vehicles, hybrid traction vehicles or parking areas with charging stations



### FOGTEC IN A NUTSHELL

- 4 business units: RAIL, TUNNEL, STATIONARY, NEC
- WORLD MARKET LEADER for railway applications
- IRIS certified, ISO 9001, EN 15085-2
- Private owned company
- Present in > 40 countries



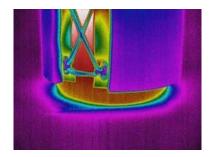


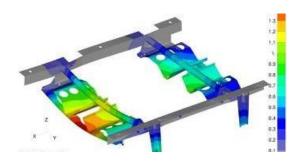
# **CONSULTING**

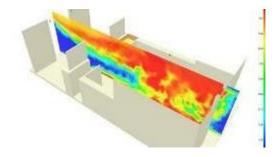
# **IFAB**



- Fire Risk Analysis
- Fire Safety Concepts
- Full scale fire tests
- Feasability studies
- Fire protection engineering









# FIRE DETECTION SOLUTIONS

#### FOGTEC supplies several types of

- Central Units
- Smoke Detectors
- Heat Detectors
- Combined Detectors
- Linear Heat Detectors
- Smoke Aspiration Systems
- Gas Sensors
- Multi-Input/Output Modules

on different technical and safety levels in accordance to the specific project requirements

From Basic Integrity up to complete SIL2 solutions











# FIRE SUPPRESSION SOLUTIONS



- Gas systems (nitrogen)
- Aerosol systems
- Water Mist systems
- Combined solutions









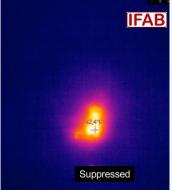
### WHAT'S COMING NEXT?

e-mobility from a different perpective – e-bikes@trains

- New Energy Carriers and related risks for railway operators and users
- Specific risk analysis and holistic approach is needed, if e-bikes will be allowed on trains.
- How to control the status of the bikes?
- Fire is may not the most dangerous to take care about: e.g. smoke / projectiles













THANK YOU!

### Gaël Wyssen

Area Sales Manager - Rail Systems

