



designed for rail



— 5000 SERIES —



5000 Series – The only complete SIL system

20 years of experience in the field. More than 15.000 systems supplied worldwide. A team devoted to rolling stock projects with specialized staff for software, electronic, mechanic and RAMS engineering. The valuable voice of our customers and partners; a strong network of prime suppliers; close cooperation with railway safety assessors, authorities and consultants: These are the solid bases of the new 5000 series product line, FOGTEC's latest development and benchmark in active fire protection in rolling stock.

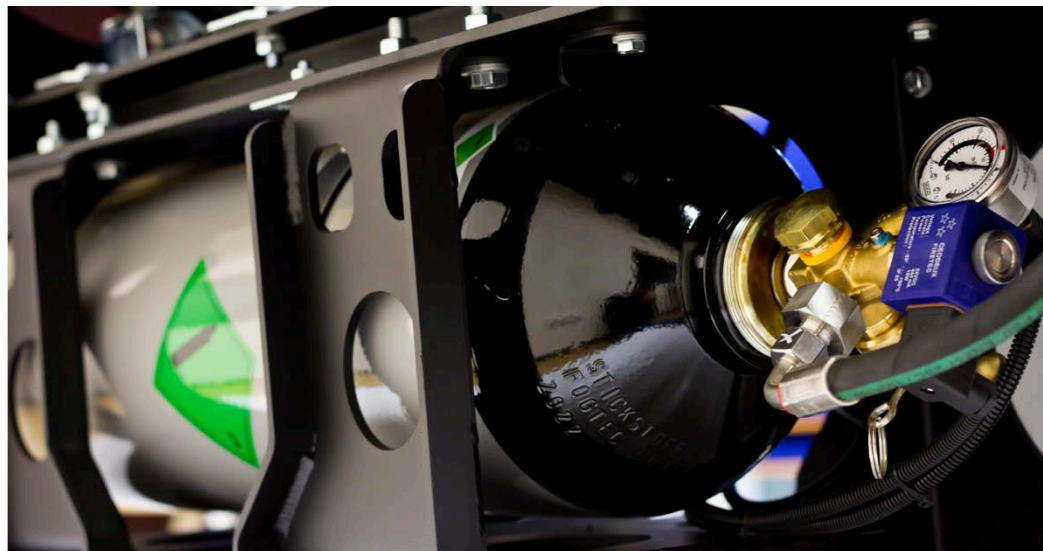
A robust and performant fully integrated fire detection and fire suppression system

FOGTEC 5000 series brings together the cutting-edge solutions of the newest developments in fire detection and monitoring product in line with the latest rail-specific developments for FOGTEC firefighting systems. The fire detection and monitoring system is modular bus-based with a layout which allows a lean and simple system design for every type of vehicle. The system architecture can be used for so-called SIL-systems or for systems without such requirements. The center units (CPU) provide a continuous monitoring of each single component with a detailed diagnostic program and communicate with the TCMS by using data-interface as Ethernet, TRDP, CAN, RS 485 or MVB. The addressable detectors are available as smoke, temperature, CO, CO₂ or multi-criteria detectors. Bus-based single and multiple I/O modules allow decentralized distributed control and monitoring of extinguishing units, digital sensors and actuators as well as interface with external sub-systems or with the TCMS. A stabilized power supply module ensures system compatibility with train power supply. All components are available for basic integrity levels as well as safety integrity levels up to SIL 2. The software development and documentation follows the latest European standards as EN 50657.

Continuous product development for the best firefighting solutions

FOGTEC 5000 series covers also a wide portfolio of firefighting solutions for every need. The worldwide established FOGTEC high pressure water mist technology, nitrogen-gas-systems and aerosol extinguishing systems are specifically developed for rail applications. The systems are approved for safety integrity level solution and tested in accordance to ARGE as well as UNI-standards with full assessment. A new nitrogen release concept made a significant reduction of water and nitrogen quantities possible, whilst maintaining the performance and with great benefits to weight and space management. New innovative valves have been adopted for enhanced pressure control, diagnostics and high reliable system activations. Multiple-cylinders modules are now available with redundant activation in order to target the highest RAMS values. The improved heating and isolating system allows a 12hrs ice-free operation without any power supply. Cylinder systems are in accordance to EN and DOT standards, complete modules get a CE-mark. System components and architecture are also designed to be certified up to SIL-2 according to latest standards. All this in order to set a new benchmark of highest performance, quality and safety.





From planning to realisation – all from one hand

As a complete service provider, we can offer all-round support for our customers on all aspects of fire protection out of one hand:

- Fire protection engineering for new or advanced vehicle developments
- Fire hazard analyses
- Fire and smoke testing
- Feasibility studies
- Development of systems in the area of fire detection and firefighting technology
- Software development
- Installation and commissioning
- Maintenance and service

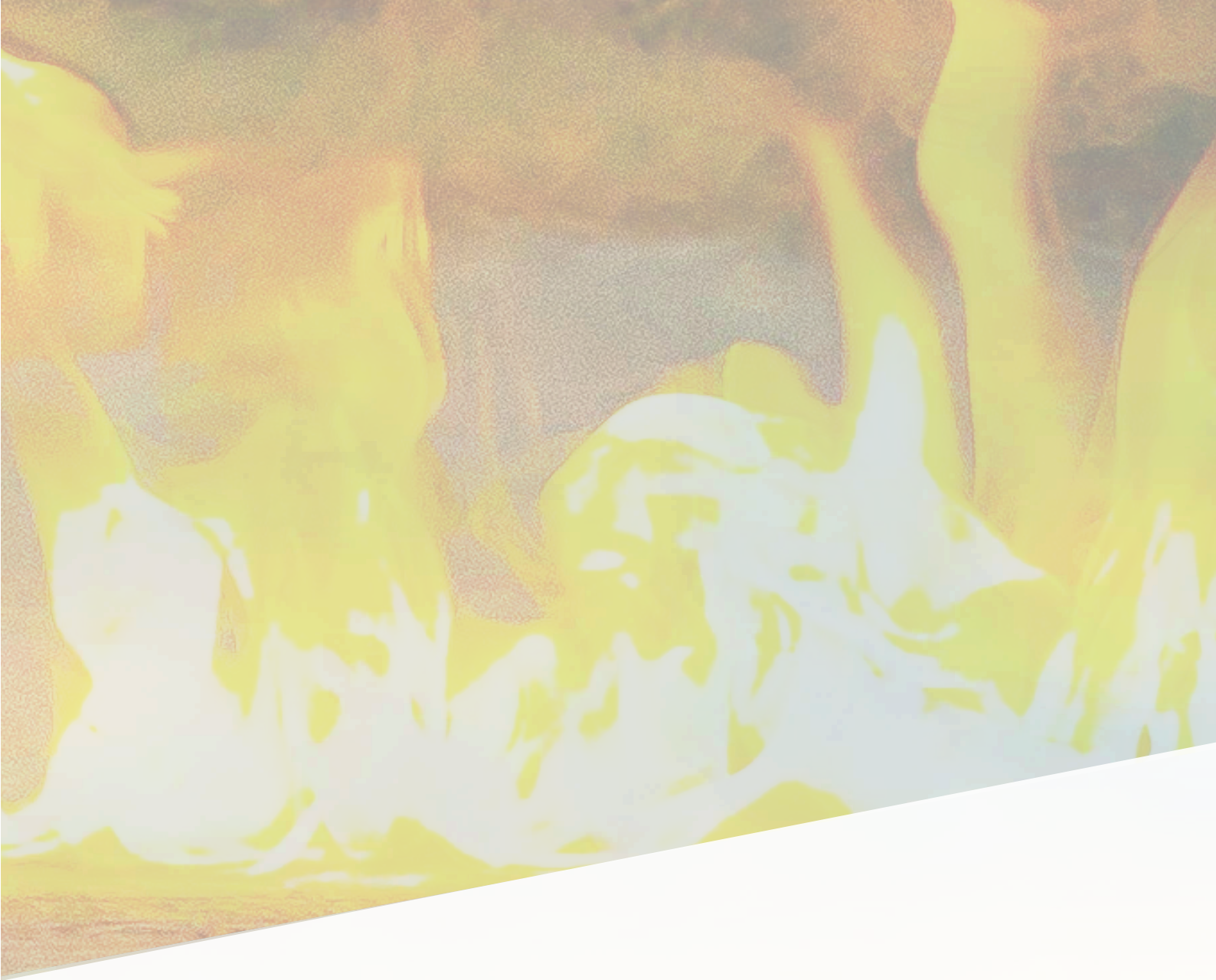


IRIS 
Certification

About us

FOGTEC is an owner-managed German company with more than 20 years of experience in fire protection. FOGTEC fire protection systems can be used for a wide variety of applications – for instance, for the protection of buildings with unique architecture, of sensitive IT technology, of industrial systems or of public infrastructure such as rail vehicles, underground stations or cable tunnels. With a global network of own locations and cooperation partners, FOGTEC systems are in operation on every continent in many different applications. The systems are designed by experienced engineers with outstanding know-how in fire protection, software engineering and installation as well as relevant standards and guidelines. The product and service portfolio covers consulting and conceptual design works, development, installation and commissioning of fire detection and firefighting systems for all applications. We offer retrofit, new development and fully turn-key projects.





Cologne • Germany