



s.tec
GERMANY



Your **expert** in
volunteer and professional
fire brigades and rescue
services

For many decades, s.tec has been successfully active as the leading manufacturer in the field of source extraction of gases, fumes and dust.

From designing, components and assembly to commissioning, s.tec carries out the complete program for the source capturing of smoke, dusts, exhaust gases and overspray.

Settled in Hagen / Germany, s.tec offers an international scope combined with cutting-edge developments and products "Made in Germany". s.tec provides solutions that cover a large range of applications including extraction equipment for lawn mowers and diesel locomotives. Our reputation in Germany and throughout the world with major automotive manufacturers speaks for itself.



Fire/Rescue Services

When every second counts

Since every second counts here, we have developed a special system: the FireMaster series.

We have the ideal solution for fire and rescue service stations that meet German statutory regulations E DIN 14502-2 (for Firefighting and rescue service vehicles) and TRGS 554 (Diesel motor exhaust regulations).

For volunteer and professional fire brigades, rescue services, and airport response teams, **s.tec Germany** offers optimal solutions for extracting exhaust gases from workplaces to protect the health of their workers. In Germany the statutory regulations (TRGS 554 „Exhaust gases of diesel engines“ and E DIN 14502-2 „Firefighting and rescue service vehicles“) must be observed.

Regardless of whether the vehicle has an overhead exhaust, the exhaust is at the far front of the vehicle, or behind the vehicle, whether the exhaust extraction system should be movable within the slotted suction channel or hung from a system rail, the FireMas-

ter series offers the right solution for every need.

The basic idea behind the FireMaster series is the ability to move the exhaust extraction system into position and to allow for automatic uncoupling when moving the vehicles out of the station house. This setup makes it possible to drive off directly if the brigade is called out on a run. The speed at which the vehicle leaves the station does not matter, but the automatic decoupling saves valuable time.

The hose guide is always close to the vehicle, ensuring unrestricted freedom of movement. Our systems keep dangerous swinging movements of the hose after detachment to a minimum.





FireMaster Topline

The solution for the future as an open detection system

The **s.tec Germany** FireMaster Topline series is an open system that allows the selective detection of exhaust gases when starting and driving emergency vehicles out of the station. The automatic system sets the highest standards for ease of use and safety and places no restrictions on the exit speed. Attached to the suction tube is a magnetic release device coupled to a support plate on the vehicle with a magnet. There is no frictional or positive connection to the vehicle exhaust. This prevents any damage to the exhaust after-treatment (Euro VI) systems.

When driving out, the coupling is actuated at a defined trigger point with reversing permanent magnets and the hose is automatically released and repelled by the vehicle. The speed at which the vehicle leaves the station does not matter. The narrow hose guide on the vehicle provides unrestricted freedom of movement within the station. The internal balance prevents dangerous swinging of the hose after it is detached.

Due to the open connection between the funnel and the exhaust, ambient air is sucked in at the same time as the

exhaust gases. This leads to a much lower load on the suction hose and extends their useful life.

An overview of the advantages

- **Source vehicle's exhaust gas system to prevent damage in the exhaust after-treatment (Euro VI) systems installed on the vehicle.**
- **Compliance with DIN standard E DIN 14502-2 (Firefighting and rescue service vehicles) and TRGS 554 (Diesel motor exhaust regulations).**
- **Exhaust detection system for use on one or more vehicles in a row.**
- **Unlimited freedom of movement for firefighters and vehicles.**
- **Low wear-and-tear on the mechanical system due to the intake of ambient air.**
- **No need for additional power or compressed air supply.**





FireMaster Airpulse

A proven technology with a pneumatically controlled and closed suction system

The **s.tec Germany** FireMaster Airpulse system is a pneumatically controlled, automatic exhaust gas extraction system. This system was developed especially for emergency vehicles with side, rear, or bottom tailpipes. The exhaust gases arising are recognised directly at the exit point. A pneumatically operated collar causes the frictional sealing of the exhaust and thus extracts the exhaust gases.

The Fire Master Airpulse system consists of a special exhaust hose with high temperature-resistance. A compressed air cuff is mounted on the exhaust hose. This is placed on the exhaust tailpipe. By operating the hand valve, the air pressure closes the cuff tightly around the tailpipe to allow for full extraction of the exhaust without any escaping fumes.

Through the pressure switch and the appropriate control unit, the ventilator is activated when the vehicle engine is started. The hose bundle and the carriage follow the vehicle smoothly. When exiting the vehicle hall, the disconnecting valve is actuated at a freely adjustable point. The compressed air escapes from the cuff and the connection to the tailpipe is disconnected. The carriage rolls in the direction of travel up to the rubber-mounted end stop that receives the kinetic energy of the hose bundle.





FireMaster Overhead

Intelligent solution for overhead exhaust pipes

The FireMaster Overhead system was developed for targeted, efficient detection of exhaust gases from vehicles with overhead exhaust pipes. The overhead system consists of a suction slot channel with carriage and a suction hood which is automatically coupled via magnets on the vehicle. The magnet (anchor plate) is attached to the exhaust tailpipe of the emergency vehicle.

When driving out of the station, the fan starts either manually or automatically. This allows the detection of the exhaust gases during start and exit to the station door, where the vehicle detaches from the funnel and departs unrestrained. After an adjustable overrun time, the fan is switched off and the trolley waits at the station door for the vehicle to return, where it automatically reconnects to the vehicle.

The FireMaster Overhead is an open, point-by-point detection system to prevent damage in the exhaust after-treatment (Euro VI) systems installed on the vehicle.

This type of extraction system is highly dependent on the structural specifics of the fire station as well as the type of vehicle. Our expert sales representative will be glad to tailor a solution to your needs.

We also use a larger version of the FireMaster Overhead system especially for airport fire brigades.



International **experience** –
worldwide **service**.



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