



Your expert in source extraction of diesel exhaust.



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 / German, 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.



# We offer tailor-made solutions for your business which protect your employees from health risks in the workplace and comply with the legal framework.

The range of special equipment is vast and includes exhaust extraction systems for dynamometers, agricultural and construction equipment as well as locomotives. It is difficult to use standard products in these areas, as each individual system has to be designed according to the structural characteristics and the characteristics specific to each vehicle. That is why s.tec Germany offers its customers the whole package; from individual consultation and planning right up to production and installation.

# We offer the following special system configurations

- Hose reels with spring drive or electric drive for hoses with a diameter of 75 250 mm, with an extraction volume of 500 to 3000 m<sup>3</sup>/h, also available as a compact unit
- Individual or central extraction fans with a volume of 500 to 20000 m³/h
- Electric single control or central control, with optional remote control and connection to your building control system.
- Swivel extraction pipe brackets with wall brackets, can be rotated by 180° also available with telescopic extraction pipe with an extraction volume of 2000 to 8000 m<sup>3</sup>/h
- $\bullet$  Swivel-mounted wall brackets, includes suction boxes, with single or double aluminium rail systems with an extraction volume of 1500 to 12000 m<sup>3</sup>/h



We provide the perfect extraction solution in your hangars for railed vehicles and service workshops to protect against diesel engine emissions.

From diesel locomotives to steam engines, s.tec Germany has experience both nationally and internationally in capturing harmful substances.

The s.tec extraction system gives our customers the option to optimise the work place in workshops and service and maintenance facilities. Our intelligent solutions offer improved workflow and safety in the workplace.

### Is it possible to perform extraction on two parallel rails?

s.tec Germany makes this possible and our customers have an optimised workflow thanks to the flexible use of the extraction unit. This means that it can be used on one rail, while other work, such as operating a crane can be carried out on the other rail.



**Movable extraction racks** – The electrically-driven extraction racks are ideal for use on larger extraction areas over several rails. Our wealth of experience means that we can find a solution for any problem regarding the capture of harmful substances from diesel engine emissions.



**Swivel-mounted aluminium rail system** – The swivel-aluminium rail system is a fixed solution for capturing harmful substances from diesel motor emissions within a larger radius of 3-9 m. The bracket can be fully rotated more than  $180^{\circ}$  and the carriages are controlled along the rails either manually or electrically. The extractor hood can also be lowered onto the exhaust either mechanically or electrically.



### Flexibility that meets all of your requirements.

With our standard and individual systems, it doesn't matter if your agricultural and construction machinery is large or small, wide or narrow, you have the ideal way to capture the exhaust gas extraction in your workshop.

Due to the nature of its function or the brand, every vehicle model has a different exhaust system. This includes factors such as design and positioning, which is why s.tec Germany offers a large range of extraction nozzles. These can be easily exchanged depending on the usage and design. The result is a selective and efficient exhaust gas extraction.

Do you need a special solution for your company?

We would be happy to create a special solution to suit your needs. Any special requirements that are due to structural and vehicle specific factors are taken into account by the targeted use of our components.

## Various models and methods of attachment

- Mobile extraction devices with hose reels for raised exhaust systems for use on underfloor exhaust systems.
- Extraction arms for upward-facing exhaust pipes in diam. 160 and 200 mm
- Compact hose reels with extraction fan for diam. 100 250 mm
- Aluminium rail system with manual or electrically-driven hose reel.
- Aluminium rail system with multiple moveable carriages in diam. 100 300 mm

- $\bullet$  Telescopic-extraction pipe brackets which extend horizontally from 3-8 m and can be rotated at least 180° with an extraction volume of 1000 to 3000 m<sup>3</sup>/h
- Swivel-mounted aluminium rail system from 3 9 m long with an extraction carriage for a volume of 1000 3000 m<sup>3</sup>/h, manually or electrically driven





To guarantee the optimum capture of harmful substances from diesel engine emissions for agricultural machines and construction machines, the exhaust gas flow of the test vehicle should be taken into account. The key parameters are the cubic capacity and the rpm of the engine along with the combustion process (spark ignition or self-ignition).

When rating the exhaust gas extraction system, both the extraction element and the exhaust system play an important role. The following chart can be used as an indicator. Using the given diameter of the hose we can use our professional expertise to select the appropriate extraction elements.

Construction vehicles Type	Cubic capacity [L]	RPM [RPM]	Cleaning the diesel particles		Air performance [m³/h]		Exhaust tube  Nominal diameter [mm]	
			without	with				
small	upto 4	2400	450	650	1295	1870	150	200
medium	4 to 8	2100	450	650	2265	3270	200	250
large	8 to 12	1600	450	650	2590	3735	200	250
extra large	12 to 18	1800	450	650	4370	6300	300	350

The required nominal diameter of the extraction hose can be established with an air speed of 18 - 22 m/s in the hose.





# International experience – worldwide service.



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We are member!

Federal association of manufacturers and importers of automotive service equipment r.a.