



INNOVATIVE ROLLING STOCK SOLUTIONS FOR THE ENVIRONMENT:

Fischer Abgastechnik has been a specialist in exhaust gas purification for over 20 years.

Our mission and motivation can be summed up as: Clean air, out of responsibility for people, the environment and machinery!

For us, responsibility means harnessing the potential of innovative ideas to meet the requirements of emission directives and help preserve resources.

Our engineers specialise in custom-built, special solutions so that the principles of sustainability can be applied efficiently to new or existing systems for a variety of sectors.

We would be pleased to set up a face-to-face meeting to show you the specially developed technological solutions we can offer for your specific applications.

- Exhaust gas technology
- Particulate filters
- Thermal management
- SCR-DeNOx systems
- Silencers
- Spark arrestors
- Mobile fire suppression systems
- ORC – Energy-efficient solutions based on waste heat

Fischer Abgastechnik GmbH & Co. KG
 Spatzenweg 10
 48282 Emsdetten

T +49 (0) 25 72 / 967 49-00
 F +49 (0) 25 72 / 967 49-50
 info@fischer-at.de
 www.fischer-at.de



ROLLING STOCK



WE ARE ALREADY DEVELOPING THE SHAPE OF THINGS TO COME

In light of current and future emission limits, the exhaust aftertreatment system needs to be individually configured to ensure ideal system integration into new or existing applications.

Our strength lies in the development of unique systems for rolling stock and the industrial sector, as well as the design and continuous improvement of SCR-DeNOx systems, thermal management systems, particulate filters, oxidation catalysts, programming and control units.

Benefit from our expertise for the following services:

- 3D design
- FEM calculation
- Control unit development
- In-house programming
- In-house development in the area of thermal management
- CFD analysis
- Vibration analysis

THERMAL MANAGEMENT

To enable the regeneration of particulate filters in rolling stock applications running on MGO/MDO, we offer a proprietary solution in the form of our **HELIOS FFB full-flow burner**. This enables exhaust gas aftertreatment even under partial load and operating conditions that involve low exhaust gas temperatures.

Smart measurement and control technology is used to control and monitor the system.

READY FOR EU STAGE V

SCR SYSTEMS

With the **SCR (Selective Catalytic Reduction) catalysts** from Fischer Abgastechnik, you can always be sure of compliance with the latest limit values stipulated by the emission regulations for **rolling stock** and **the industrial sector**.

The **SCR-Smartline** system featuring energy-reduced low-pressure air injection has been developed for **railway engine applications** with a power of up to 1 MW.

For **rolling stock** applications of > 1 MW, the modular **SCR-HD systems** are available for use in large and multiple engine systems.

Below is an excerpt from the current NOx emission limits for combustion engines:

RLL	≤ 4,0 g/kWh (NOx + HC)
RLR	≤ 2,0 g/kWh (NOx)
NRE	
56 ≤ 560 kW	≤ 0,4 g/kWh (NOx)
[≥ 560 kW	≤ 3,5 g/kWh (NOx)]
EPA Tier IV	≤ 1,3 g/bhp*hr

PARTICULATE FILTERS

Specially designed and manufactured to suit your requirements, our particulate filter systems are extremely effective at reducing soot emissions from main and auxiliary engines.

When combined with an oxidation catalyst, the following reductions in harmful substances can be achieved:

Carbon monoxide (CO):	< 98 %
Hydrocarbons (HC):	< 95 %
Soot particles:	90 to 99 %

Current EU Stage V limits for combustion engines:

RLL:	PM 0,025	g/kWh
RLR:	PM 0,015	g/kWh
	PN 1*10 ⁻¹²	#/kWh