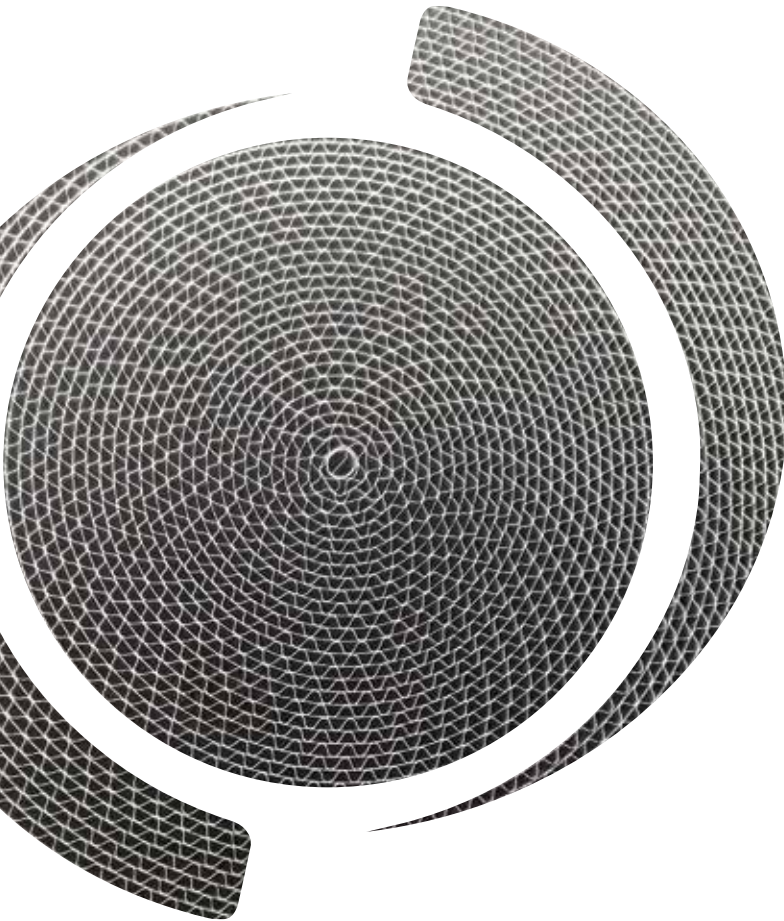


T-blue NOx reduction system

Selective Catalytic Reduction (SCR)



AT A GLANCE

- Long-tried-and-tested technique for reducing NOx emissions
- Utilizable with mobile machines, vehicles, rail vehicles, ships and fixed equipment
- Suitable for diesel and gas engines
- Automatic control and function monitoring
- High reduction rate of NO und NO₂
- Initial equipment and retrofitting with T-blue NOx reduction

With the »T-blue NOx« reduction system you clean the exhaust gases of your diesel or gas engine of gaseous nitrogen oxides NO and NO₂, which are summarised as NOx.

The system works according to the principle of "Selective Catalytic Reduction" (SCR), the only long-term proven concept for the reduction of NOx in diesel exhaust gases. The basis of SCR technology is urea as a reaction agent, which is injected into the exhaust gas stream in a water-diluted solution under high pressure.

Urea is mainly known under the brand name "AdBlue". In a special catalyst the urea solution evaporates and reacts on the coating of the catalyst with the pollutants NO and NO₂ from the exhaust gas to the harmless substances N₂ and H₂O.

The T-blue NOx reduction System is suitable for equipping mobile machinery and vehicles, rail vehicles and ships as well as stationary applications.

PRODUCT OVERVIEW

- | | | |
|--------------|-------------------|---------------------------|
| Active DPF | Muffler | Catalysts |
| Passive DPF | Thermal isolation | Spark arresters |
| • SCR-System | Exhaust pipes | Pipe Connection Technique |

(e.g. CHPs, emergency power generators or construction site generators). If the T-blue NOx reduction system is combined with a TEHAG particle filter, an almost optimal exhaust aftertreatment can be achieved, as all regulated pollutant groups in the exhaust gas are sustainably reduced.

FUNCTION

The T-blue NOx reduction system was developed in such a way that as little data as possible from the engine is required for the correct dosing of the urea solution as the decisive system function.

Using various parameters, which the system determines with its own sensors, the controller calculates the amount of urea to be introduced and the delivery pressure.

The temperature in the SCR catalytic converter is permanently monitored to ensure optimum evaporation and thus reaction of the urea solution. If this falls below a defined limit value, the urea dosing is automatically stopped in order to prevent possible crystallization.

T-blue NOx reduction system PROCESS DIAGRAM

