SCR Catalyst

A Selective Catalytic Reduction (SCR) catalyst is an emission control technology used in diesel engines.

Function

The SCR process converts harmful nitrogen oxide (NOx) emissions in diesel engine exhaust gases into nitrogen and water. To achieve this, a urea solution, for example AdBlue, is precisely injected into the exhaust system before the SCR catalyst, as a reducing agent.
The term "selective" refers to the fact that the oxidation of the reducing agent preferentially reacts with the oxygen in nitrogen oxides, rather than with the more abundant molecular oxygen in the exhaust gas. The SCR catalyst can reduce NOx emissions by up to 80%.

Safety

The SCR catalyst is a safe technology, as it does not affect the operational safety of the engine. However, it is essential to ensure that the urea solution is correctly injected and that all components of the SCR system function properly to maintain optimal performance and efficiency.

Environmental Protection

By using an SCR catalyst, the amount of nitrogen oxides emitted by combustion engines is significantly reduced. Nitrogen oxides contribute to air pollution and have harmful effects on the environment. Reducing NOx emissions through SCR technology helps improve air quality and minimises the impact of combustion engines on climate change.

Value Retention

An SCR catalyst can help maintain the value of vehicles. Since SCR technology reduces emissions, vehicles equipped with SCR systems comply with current environmental regulations. Diesel vehicles retrofitted with an SCR catalyst can meet the required NOx limit of 270 micrograms per cubic metre and may be fully exempt from diesel driving bans.

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