The market leading Eminox CRT® (Continuously Regenerating Trap) System virtually eliminates Particulate Matter, Hydrocarbons and Carbon Monoxide from diesel engine emissions. Eminox is utilising proven SCR (Selective Catalytic Reduction) technology to reduce the fourth major pollutant, Nitrogen Oxides (NOx). The combination of these technologies in SCRT® provides a system which reduces all legislated diesel engine emissions.

The Eminox SCRT® system is supplied as original equipment and for retrofit, allowing Euro 1 to 3 vehicles to meet Euro 4 and 5 emissions levels.

Different configurations are available to suit a wide range of vehicles. Options include close coupled, linear (in line) and compact drum configurations, developed for effective space utilisation. Unique mixing technology allows extremely close coupling of the SCR and CRT® components.

The upstream CRT® component works to condition the exhaust gas to maximise NOx conversion in the downstream SCR component. The standard Eminox SCRT® system can achieve NOx reduction of up to 80%. The dosing of AdBlue is actively managed to maintain consistent NOx reduction and reliable performance.

Where required, Eminox can develop an SCRT® Optimum system to meet specific primary and secondary emissions targets. This may be achieved using alternative catalyst formulations, combined with application specific development of the ECU (Electronic Control Unit) calibration. Further optimisation of the unique mixing system increases efficiency, so the SCRT® Optimum system can achieve NOx reduction in excess of 90%.

Eminox SCRT® systems are robust and reliable with catalyst and filter components protected by high grade stainless steel. This offers a cost effective solution to emissions reduction.
Technology

The CRT® component houses a specially formulated oxidation catalyst and ceramic wall flow filter. The filter is able to trap very fine particles and the NO₂ output of the catalyst facilitates continuous cleaning of the filter. Exhaust gases leaving the CRT component are dosed with AdBlue (a urea based reducing agent) and the aqueous solution passes through the SCR catalyst. This catalytic reaction reduces NOₓ to harmless emissions of nitrogen and water. An ECU manages urea injection to control NOₓ conversion without allowing unused urea to escape as ammonia. Additionally, a “clean up” catalyst is included post SCR to ensure that no ammonia is released from the system.

Features and Benefits

- Uses unique mixing technology which increases efficiency
- Systems are manufactured from high grade stainless steel
- Incorporating specially formulated Johnson Matthey catalyst technology
- Proven urea injection system, as used for Euro 4 OE vehicles
- Systems are type approved, meeting EMC (Electro-Magnetic compatibility) requirements
- Standalone Eminox SCR systems are also available