



## SCRT® Technology and Application. First experiences with 3rd generation SCRT® systems

SCRT® is a well-established after treatment technology that has maintained prominence in both the OE and retrofit markets through regular technical advancements. With the EURO VI standard becoming mandatory for new vehicles from 2014, SCRT technology has become an integral part of the original configuration of heavy-duty diesel powered vehicles. Especially for buses in service for public transport, SCRT®-retrofitting enables pre-EURO VI buses to serve in pollution hot-spots with a very high emission reduction performance

The new generation 3rd SCRT® system of Eminox does not only achieve excellent reduction figures for Nox, NOx, PM and other secondary emissions; the system is much smaller and makes the systems easier to apply to a greater number of applications within the existing envelope space. Millbrook tests with a Scania L94 bus retrofitted with a 3rd generation SCRT® system revealed – among others - the following figures: NOx reduction: 95%; NO2 reduction: 96.7%; Peak NH3: 0.5ppm; CO2 eq (N2O): 0.75%.

The paper presents a history of the development of SCRT® systems with the respective emission reduction figures from 1<sup>st</sup> and 2<sup>nd</sup> generation systems. The 3<sup>rd</sup> generation SCRT® system of Eminox with its newly developed SCR catalyst by Johnson Matthey exceeds previous performance. These systems offer excellent performance of regulated and secondary emissions in real world environments. They are smaller in size than previous generation of SCRT, making it possible to apply them to difficult applications. This new technology provides Eminox/JM the technical solution to combat local air quality requirements reliably and safely.

Emission	Dennis Dart	Volvo B7TL	Dennis Trident	BMC Condor	Scania L94
	Generation 2 catalyst				Generation 3 catalyst
NO <sub>x</sub> reduction	88%	88%	97%	97.1%	95%
NO <sub>2</sub> reduction	54%	49.3%	86.9%	55.6%	96.7%
NH <sub>3</sub> peak	8.5ppm	0.5ppm	0.4ppm	0.6ppm	0.5ppm
CO <sub>2</sub> eq (N2O)	2.3%	0.6%	0.8%	3.9%	0.75%

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