

Case Study: DeLijn Buses, Belgium

SCRT[®] retrofit programme reduces both nitrogen oxides and particulate matter

DeLijn is the public transport operator for the Flanders region of Belgium, running almost 3,600 buses throughout the region. Since 2000 DeLijn has been working with emissions specialist Eminox to reduce particulate matter (PM) emissions, fitting almost 700 buses with Eminox CRT[®] (Continuously Regenerating Trap) systems. This has reduced particulate matter emissions from these buses by more than 90%.

Advanced Emissions Reduction Technology

Having reduced PM emissions from much of its fleet, DeLijn also wanted to respond to increasing health concerns associated with nitrogen oxides (NOx) pollution from diesel engined vehicles. Eminox has developed advanced emissions technology; the Eminox SCRT[®] system, capable of eliminating up to 80% of Nitrogen Oxides (NOx) and more than 90% of Particulate Matter. The system combines the CRT[®] with SCR (Selective Catalytic Reduction) technology to achieve emissions standards equivalent to the Euro 5 standard on Euro 3 vehicles.

Europe's largest retrofit programme to reduce both PM and NOx

DeLijn reviewed options for reducing NOx emissions from its fleet and in November 2006 began trialling the Eminox SCRT[®] system. A data-logger and modem on the trial bus were able to show real-time performance, registering high NOx reduction as well as virtually eliminating PM, hydrocarbons and carbon monoxide. The system proved its reliability throughout the 50,000km travelled during the trial. Based on the proven system performance, De Lijn chose to proceed with a retrofit programme to fit 168 buses, including city buses in Antwerp and Limburg plus regional and inter-city buses.

Freddy Van Steenberghe, Department Head, DeLijn, said: "This announcement follows a successful bus trial, in which the SCRT[®] system consistently achieved an impressive 75-80% reduction in nitrogen oxides (NOx)".

Following the start of the retrofit programme, DeLijn decided to fit an additional 78 buses, taking the total to 246; the largest retrofit programme of its kind in Europe.

