



# BACK ON TRACK!

## → WITH PROVENTIA SCR RETROFIT SYSTEMS

Nitrogen oxides (NO<sub>x</sub>) along with particulate matter (PM) are the two most harmful diesel engine-borne pollutants to health and environment – and the two most costly. When driving in Low Emission Zones or other emission regulated areas with a highly polluting vehicle or machine, your vehicle can get banned or fined. With Proventia's comprehensive solutions for retrofitting you can bring your machines and vehicles up-to-date.



## Upgrade Your Vehicle With Proventia NOxBUSTER™ SCR Retrofit System

### RETROFIT TO MEET REGULATIONS

To make your vehicles up-to-date you have two options: invest in new machines or vehicles with low-polluting technology or in retrofitting your existing machines with a modern emission control system. The end result will be the same; however retrofitting is many times more cost-efficient in upgrading your vehicles' emission levels.

### LET US INTRODUCE:

#### PROVENTIA NOxBUSTER™

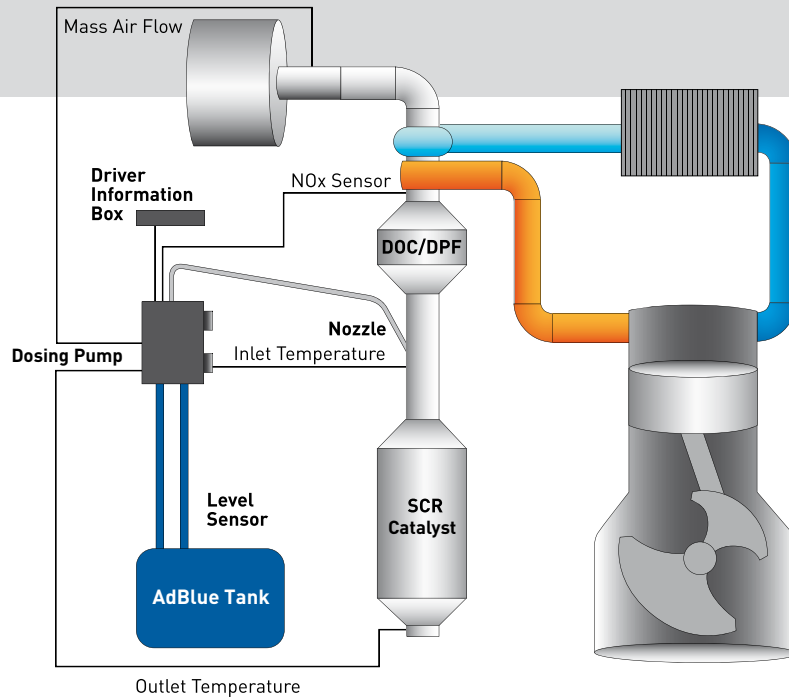
Proventia NOxBUSTER™ SCR Retrofit system is a comprehensive concept for emission control in on-road and off-road retrofits. Offering SCR (selective catalytic reduction) technology for efficient NOx reduction, the concept can be complemented with a diesel particulate filter (DPF) for PM reduction and a diesel oxidation catalyst (DOC) for HC and CO reduction.

Retrofitting with NOxBUSTER™, that combines SCR with DPF, can make your on-road vehicle as clean as a new one with EURO V engine, and will upgrade your off-road machine from Stage II to Stage IV.

Proventia has decades of experience in using the SCR technology in stationary & marine applications.

### EFFICIENT SCR

The SCR technology plays a key role in Proventia NOxBUSTER™ retrofit systems. It is the easiest and the most efficient way to reduce NOx emissions from diesel engines. SCR technology uses AdBlue® and a catalyst to convert NOx into nitrogen (N<sub>2</sub>) and water.



## Operation Principle

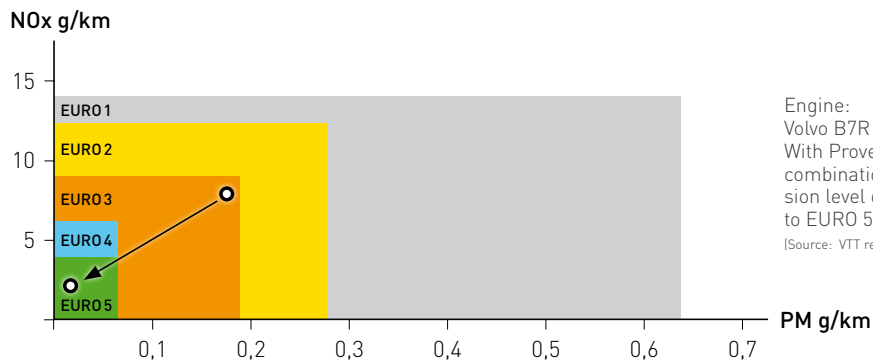
Proventia NOxBUSTER™ SCR systems use vanadium based SCR catalysts, developed to meet the tightest emission requirements. The SCR control unit monitors the engine operation point and the amount of NOx in the exhaust gas. An optimal amount of AdBlue® is

injected into the exhaust gas stream to reduce NOx over SCR catalyst.

NOxBUSTER™ SCR retrofit system operates independently; it includes a urea pump and a control system that guarantee smooth operation in all applications. We at Proventia

design the application specific canning and integrate the complete system with optional devices, like DOC or DPF, and all necessary SCR components like AdBlue tanks and pipings to fit your machine or vehicle.

### EMISSION LIMITS FOR HEAVY-DUTY ON-ROAD VEHICLES



Engine:  
Volvo B7R L, Euro 3, 2004  
With Proventia SCR + DPF  
combination the overall emission level drops from EURO 3 to EURO 5 level

[Source: VTT research report No VTT-R-01293]



## Specifications & Benefits

- For on-road and off-road machines and vehicles 70-450 kW
- NOx reductions over 80%
- PM reduction over 90% with optional DPF
- Reliable operation in all applications with independent urea dosing system
- On-board diagnostic procedure informs the driver about the status of the system
- Application specific canning
- No power loss
- Upgrades your on-road vehicle from EURO III up to EURO V
- Upgrades your off-road machine from Stage II up to Stage IV