

LONDON LEZ



Innovation for a cleaner environment

Diesel

Exhaust Filter

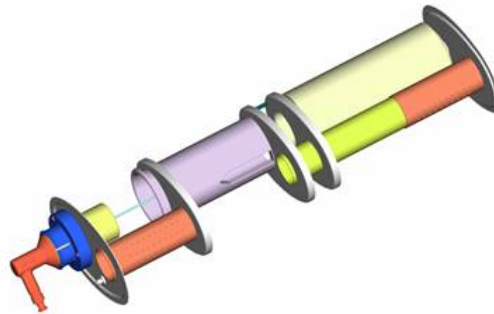
Power Trap™



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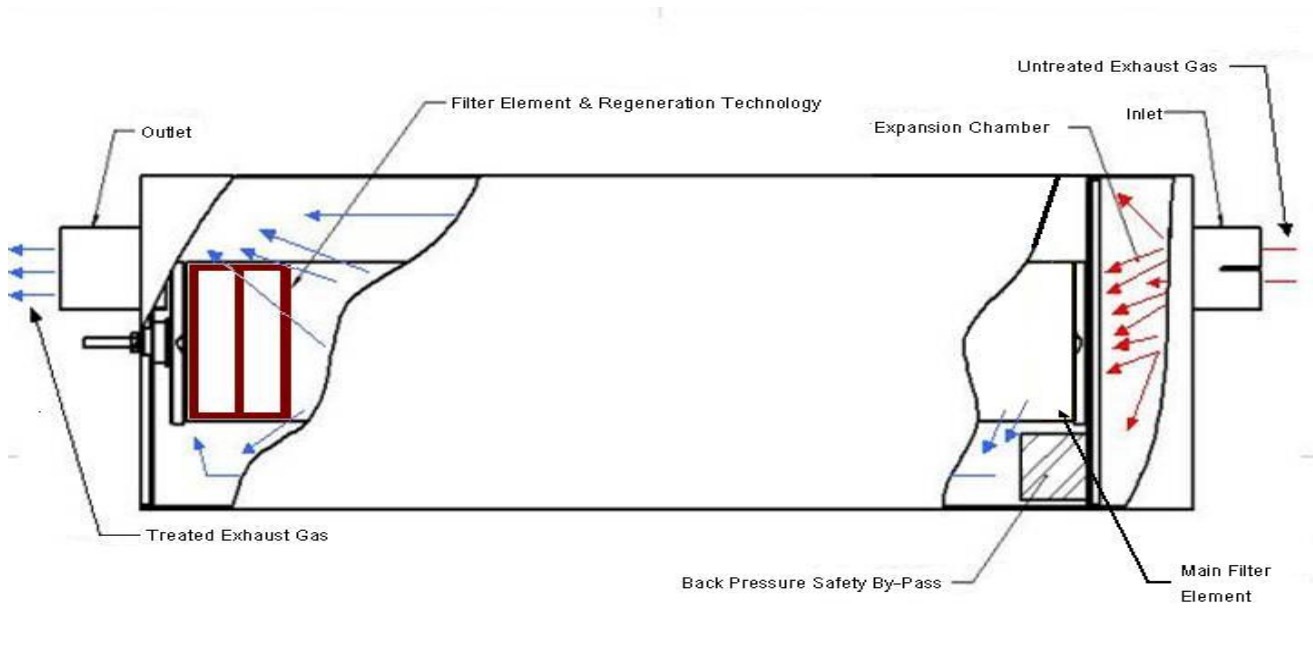
Power Trap™



PowerTrap™ Diesel Exhaust Filter

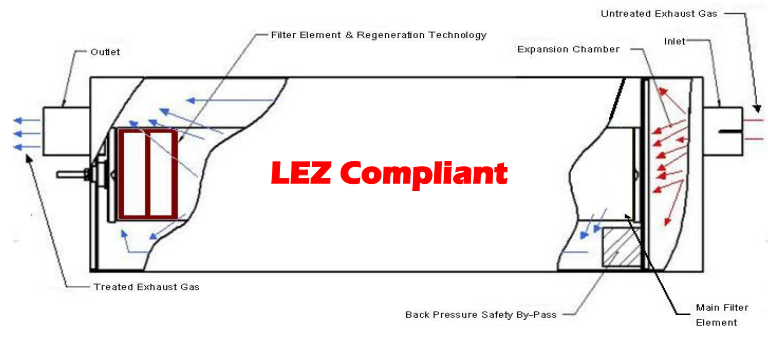
Per-Tec PowerTrap™ particulate filters are designed to reduce emissions of particulate matter (PM) from diesel engines. The filters first trap particulates and then use a patented regeneration technology to periodically burn them at normal diesel operating exhaust temperatures.

LEZ Compliant



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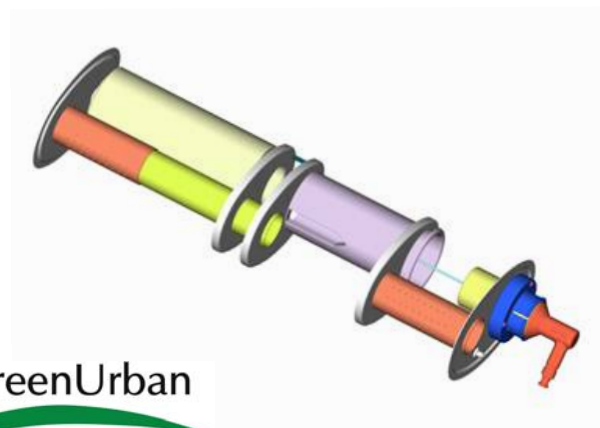
Power Trap™



PowerTrap™ Diesel Exhaust Filter

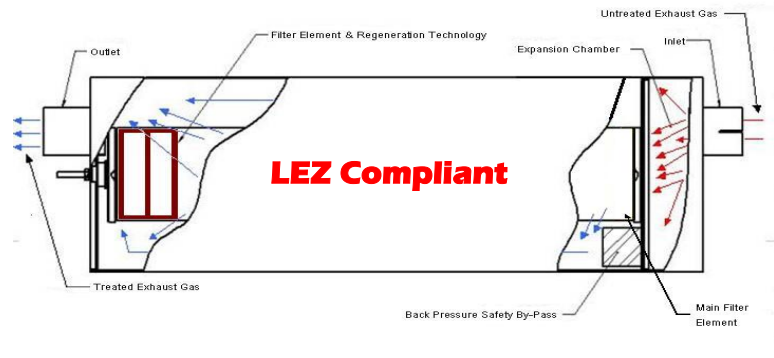
- Key characteristics of The PowerTrap™ particulate filters include:
- Reduce PM Mass by up to 70%
- Can be provided in a standard or custom configurations
- Features a simple design and economic construction for easy installation
- No Maintenance Requirement & Cannot Block - unlike other technologies
- Up to 60% cheaper than Full Flow CRT (continuous regenerating trap) style DPFs
- Replaces existing silencer in most applications

The PowerTrap™ will take Euro2 – 3.5 Tonne to 20 Tonne HGV's and Coaches to Euro3 Particulate levels making them LEZ Compliant



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Power Trap™

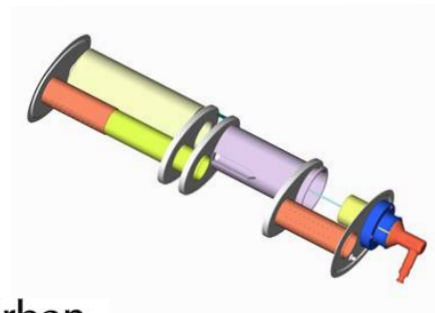


PowerTrap™ Diesel Exhaust Filter

How it Works

- The exhaust gas enters expansion chamber and expands reducing pressure & noise
- The exhaust gas then makes its way into the main filter
- The particulate is collected in the filter and works its way down a specially designed support tube into the cylindrical heating element.
- The particulate collects in this chamber and regeneration takes place at preset intervals using a low power heating element to initiate a controlled particulate burn. The timing and regeneration is determined by the exhaust flow and Euro level of the vehicle.
- The regeneration process uses the vehicles own power to operate the heating element and the PowerTrap ECU can be programmed for unusual and difficult applications

The PowerTrap™ will take Euro2 – 3.5 to 20 Tonne HGV's and Coaches to Euro3 Particulate levels making them LEZ Compliant



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Power Trap™

Bus & Coach

At around 60% or less than the cost of current wall flow technologies. The **No** maintenance - Fit & forget system that regenerates on board, and cannot block. Makes the PerTec PowerTrap™ one of the best all round systems on the market.



RENAULT TRUCKS



Mercedes-Benz
Commercial Vehicles



DAF Trucks

Suitable for all Euro2 DAF Vehicles

45.130 - 150 - 180

55.180 - 210

DAF CF Range

FA - FAC - FAT - FAV - FAG - FAN - FAR - FAS - FT - FTT

75.250 - 280 - 290 - 310 - 320

85.340 - 380 - 430

DAF XF Range

FA - FAC - FAT - FAV - FAG - FAN - FAR - FAS - FT - FTT

95.340 - 380 - 430 - 480 - 530

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Controlled Regeneration

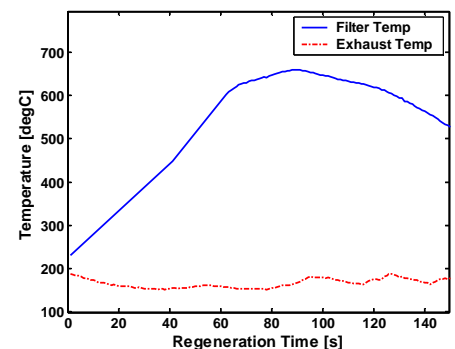
Per-Tec has developed a method to regenerate the filter cartridges automatically whilst the vehicle is in operation. The 'brain' of this process is the control unit, which constantly monitors the pre device exhaust gas temperature. The controller records the amount of time spent in a particular temperature band and these bands are set depending on the maximum-recorded pre device temperature. Based on a predetermined length of time that the exhaust temperature is in a certain band, the controller regenerates each filter according to the following conditions:-

1. Exhaust temperature must be above 50°C
2. Filter temperature must be between 100°C and 300°C
3. Which element's turn it is to regenerate?

To safeguard the alternator and battery.

There must be at least 20 minutes elapsed from vehicle switch on
There must be at least 1 hour elapsed between regenerations

The temperature inside the filter is maintained at the temperature required for the soot to burn whilst ensuring that the temperature does not exceed the filters allowable temperature limit i.e. no exothermic run away.



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IVECO Trucks

Suitable for all Euro2 IVECO Vehicles

STRALIS
DAILY CITY TRUCK

75 - 170 E15
80 - 170 E18
E 18H Range
120 - 280 E23

LEZ Compliant

SCANIA Trucks

Suitable for all Euro2 Scania Vehicles

G92 - 112
P92 - 112 - 113
R92 - 112 - 113 - 142 - 143
T92 - 112 - 113 - 142 - 143
BR145
K Range
L113, LT146



LEZ Compliant



Mercedes-Benz
Commercial Vehicles

Mercedes Trucks

Suitable for all Euro2 Mercedes Vehicles
LK 6 - 9 Tonne Range
609D, 709D, 711D, 811D, 811DK, 814D
Vario Range
512D, 612D, 614D, 810D, 812D
814D, 814DA, 815D, 815DA
Actros & Atego

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MAN Trucks

Suitable for all Euro2 MAN Vehicles
L20, L22, L24, L26, L33, L35
L70, L72, L81, L83

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