

Are you CARB Compliant?

Discover the New Benchmark in DPF Technology



**Most Cost Effective Solution Available Today
with Factory Fit and Rebate Options for a Limited Period Only**

The DET Ultra-Trap™ DPF is a passively regenerating filter for the class 8 on-road truck market. It consists of a catalyzed cordierite diesel particulate filter (DPF). The substrate material is coated with a highly active metal oxide wash coat and a specially formulated precious metal catalyst formulation. The substrate material is canned using DET's patented weld free Modu-Link™ technology.

The special catalyst coating effectively lowers the particulate matter's combustion temperature to a level that is closer to that reached during the engine's normal duty cycle. Data logging to determine the exhaust temperature profile is very important to proper DPF functionality and is used to ensure proper soot combustion can and will take place. An added benefit for passively regenerating systems like the Ultra-Trap™ is that they do not require the use of fuel additives, burners, or additional power sources, and have no moving parts.

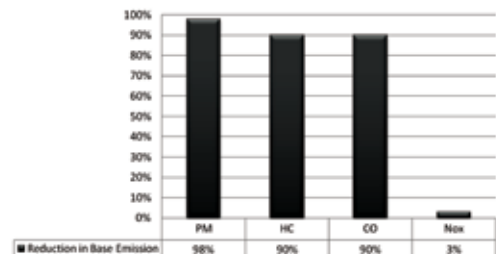
The Ultra-Trap™ system consists of a catalyzed diesel particulate filter (cDPF) positioned in the exhaust system of a diesel engine. The operating principle for a cDPF is that the exhaust gas enters multiple channels of the ceramic substrate that contains cell plugs at the opposite end. The plugged ends force the gas through the porous walls of the filter trapping more than 90% of the Particulate Matter (PM), Carbon monoxide (CO), and Hydrocarbons (HC) in the

exhaust stream. The catalyst formulation transforms the CO and HC into carbon dioxide and water as they pass through the filter walls. The chart at the bottom of the page graphically illustrates the pollutant reduction rates.

The Ultra-Trap™ is designed to replace the existing silencer, in either universal or vehicle specific kit applications. The duty cycle requirements for the DET Ultra-Trap™ to passively regenerate are as follows:

- Peaks of min. 400°C
- Average min. 220°C
- Above 260°C for 60% of duty cycle (DC)*
- Above 300°C for 15% of DC
- Above 350°C for 5% of DC

DET's Passive DPF Emission Reductions



*Temperature Requirements are Subject to Change as Test Vehicles Complete Durability Tests.

Modu-Link™ Setting the Standard in the Industry

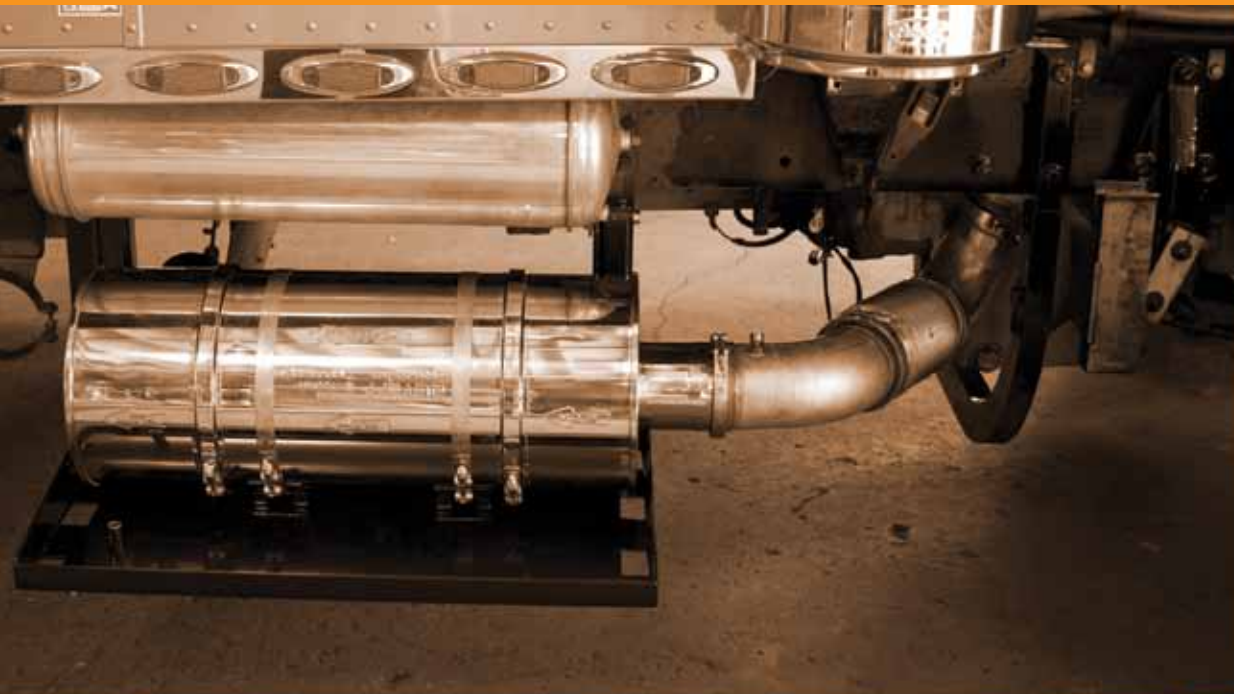


Features and Benefits

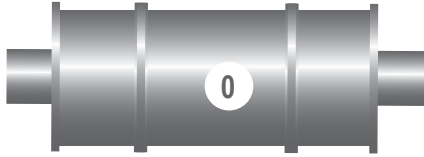
- Weld-Free mechanically formed construction
- Most robust construction on market (304 Stainless Steel): 7 times stronger than any competitor
- Modular- offering nine different top assembly configurations that suit any application
- Includes DPF, Back Traker™ (Data logger)
- Easy to Service and Clean with spare parts available 6 days a week
- Most Cost Effective System on the Market
- Quantity Discounts Available
- HD Vertical Tailpipe Outlet Versions Available
- Manufactured in California



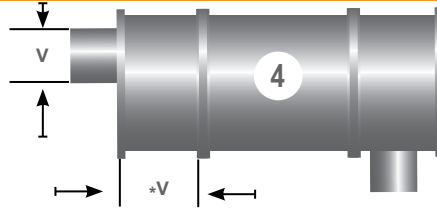
Exhaust Canning



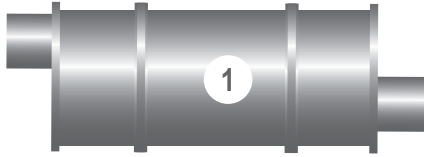
DPF Configurations



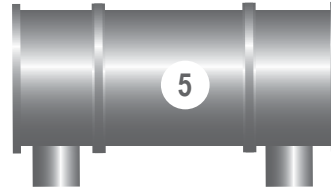
Center to Center



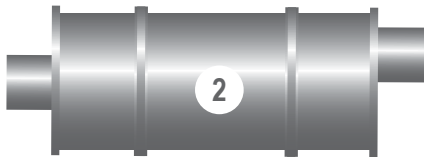
Offset to Side



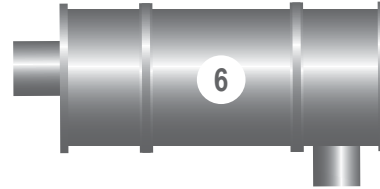
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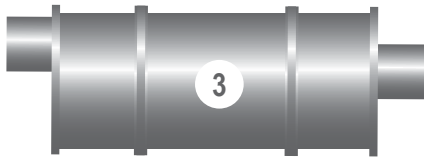
Side to Side



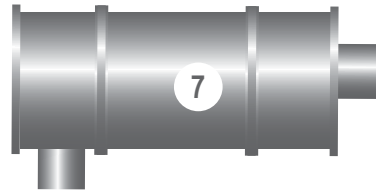
Center to Offset



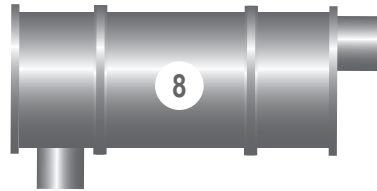
Offset to Offset



Offset to Center



Side to Center



Side to Center

* V = Variable – In Various Lengths
or Manufactured to Order



See our new Diesel Emission Accessory Catalog

Your One Stop Shop for Quality Emission Control Accessories

A properly designed DPF exhaust system requires the use of application specific exhaust accessories that can be a hassle to locate and even harder to replicate. DET's core competency in heavy duty diesel exhaust stems from our capabilities in both the manufacturing and design of quality exhaust components. Capabilities that include bending tube from 1" to 8", hydro forming bellows, our mechanically formed canning and the production and design of universal and application specific clamps, heat shields, tailpipes etc. DET's new diesel emission accessories (DEA) catalog has been designed to combine our capabilities into one easy to use catalog. From OEM to retrofit systems, DET's DEA catalog is your one stop shop for quality exhaust parts.

Operator Notification System

Most Advanced & Sophisticated ECU on the Market Today



The BackTraker™ maintenance notification system consists of an electronic control unit (ECU), connectors, wiring harness, dashboard indicator, exhaust gas backpressure sensor, exhaust gas temperature sensors and a manifold absolute pressure (MAP) sensor. The ECU sensors are pre-calibrated to monitor real-time engine speed (RPM), exhaust flow, exhaust gas temperature, exhaust gas backpressure (EGBP), as well as location (available on upgraded Track & Trace™ model). Similar to a Lo-Jack system, the Track & Trace™ feature protects your investment and gives you peace of mind. DET's BackTraker™ monitors the filter status under all operating conditions and internally records and reports on the pre-mentioned variables via a dashboard mounted LED and audible alarm system. To distinguish operating characteristics from every unique application, each BackTraker™ unit is serialized to both the DPF and vehicle it is fitted on. This provides helpful information regarding both the usage and performance of both the vehicle and filter.

The aforementioned dashboard indicator panel will be installed within the driver's line of sight. The indicator has a series of light-emitting diodes (LEDs) that serve two functions. The upper-most single LED, denoted as the "diagnostic LED," serves to notify the driver of the overall state of the filter through green, orange and red lights. Any time your filter system encounters an error it is registered internally and displayed on the dashboard indicator panel by way of an audible alarm and change in the LED's color /sequence.



Filter Status: Good



Needs Attention



Critical Error

The lower set, denoted as the "Level LED's," indicates the approximate soot load index (SLI) by displaying in percent the number of passages that remain open as the filter accumulates PM. The SLI calculation is achieved by programming each unit with the application's engine displacement and filter size. Doing so allows the software to utilize its built in algorithm for predicting PM loading. Because regeneration is not controlled in a passive system, the Backtraker's™ SLI offers the advantage of forecasting service and maintenance needs before engine backpressure rises to levels that may cause internal damage to the filter.



75% Load Needs Cleaning



50% Load



25% Load



0% Load

The BackTraker™ unit is shipped along with your DPF and is the most comprehensive and user friendly unit available.

Moving to a New Modern Production, Development and Installation Facility in Orange County.

Note: For stationary applications where operators aren't necessarily on the equipment, DET has developed a long distance notification beacon that uses audible and visual alerts to inform of the overall system status.