Diesel generator emission control has never been easier!

Diesel generators are an excellent power source, with the exception of their emissions. Particulate Matter (PM)/soot is a significant contributor to air pollution causing negative environmenal and health impacts worldwide.

Nett Technologies' GreenTRAP™ 300d is a passive diesel particulate filter (DPF) system that is designed to control PM emissions from diesel engines in stationary applications. It's equipped with an upstream Diesel Oxidation Catalyst (DOC) to simultaneously oxidize Carbon Monoxide (CO), Hydrocarbon (HC) and aldehydes contained in diesel exhaust to non-toxic compounds: carbon dioxide and water vapor. The GreenTRAP™ 300d system utilizes cordierite wall-flow monoliths to trap the soot produced by diesel engines. A proprietary catalyst is coated onto the inside surface of the filter monolith which lowers the soot combustion temperature allowing the filter to self-clean (regenerate) at lower exhaust temperatures. All of the accumulated soot inside the filter can therefore be oxidized during regular operation of the engine. In favorable operational conditions the system has a 95-99% PM reduction. In addition, the system will reduce CO and HC emissions greater than 98% and 82% respectively.

The GreenTRAP™ 300d system is customized to fit your specific application, providing you full control over PM, rather than allowing PM to control you.





Sold and supported globally, Nett Technologies Inc., develops and manufactures proprietary catalytic solutions that use the latest in diesel oxidation catalyst (DOC), diesel particulate filter (DPF), selective catalytic reduction (SCR), engine electronics, stationary engine silencer, exhaust system and exhaust gas dilution technologies. Our reliable and real-world emission solutions will extend the usable life of existing equipment while allowing you to avoid costly future replacements. We manufacture emission control solutions that are California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA) verified. As the emission control authority, we are here to help you navigate through the hassles and complexities of emission control compliance.



GreenTRAP™ 300d PRODUCT OVERVIEW

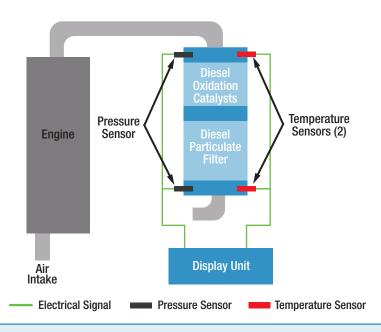
How does the GreenTRAP™ 300d system work?

Nett Technologies' GreenTRAPTM 300d system includes a passive DPF system equipped with an upstream diesel oxidation catalyst (DOC). The system and its main components are depicted below. The system utilizes cordierite wall-flow monoliths to trap the soot produced by diesel engines. The cylindrical filter element consists of many parallel channels running in the axial direction, separated by thin porous walls. The channels are open at one end and plugged at the other, forcing the particle laden exhaust gases to flow through the walls. Gases are able to escape through the pores in the wall material, particulates however are too large to escape and are trapped inside the filter.

A proprietary catalyst is coated onto the inside surface of the filter monolith. The catalyst lowers the soot combustion temperature allowing the filter to regenerate at lower exhaust temperatures. The accumulated soot inside the filter can therefore be oxidized during regular operation of the engine. Exhaust temperatures of 250-300° C (482-572 °F) for 25-30% of the operation time are necessary for proper filter regeneration, when ULSD (ultra-low sulfur diesel) fuel is used. This can be met on most heavy-duty diesel engine applications, as well as on some medium and light duty engines. Nett filters can be used with all fuels, with preferably no more than 50ppm sulfur content, however, higher exhaust temperatures will be required for regeneration.

The GreenTRAPTM 300d utilizes a precious metal coated DOC upstream of the DPF unit. The DOC core is made of corrugated, high temperature resistant stainless steel foil, packaged into rugged stainless steel containers. The DOC oxidizes Carbon Monoxide (CO), Hydrocarbons (HC) and aldehydes contained in diesel exhaust to non-toxic compounds: carbon dioxide and water vapor. In favorable operational conditions, the system can reduce up to 98% of CO, 82% HC and 99% of PM. A monitoring system along with 2 temperature sensors and 1 differential pressure sensor can be used to monitor and datalog the DPF backpressure and DOC/DPF inlet/outlet temperatures in real time. The monitoring system will notify the operator of possible system issues and will and ensure a problem free operation during the whole life span of the system.

GreenTRAP™ 300d System Schematic Drawing



PRODUCT FEATURES

- Passive system
- Ideal for diesel engines used in stationary applications (power generation, gas compression, co-generation, pumping stations and irrigation equipment)
- Compact design with thermal insulation
- Optional computerized controller with 3 customizable alarms and data logging capabilities
- System maintenance intervals of 2000 to 6000 hours
- Stainless steel housing, custom fit available
- Optional bypass valve

Typical GreenTRAP™ 300d Emissions Reduction Performance >98% reduction Carbon Monoxide (CO) Hydrocarbons (HC) Particulate Matter (PM)

