

Marine diesel emission control has never been easier!

Diesel engines are a reliable and efficient power source; however, particulate matter (PM/soot) and exhaust emissions remain a major concern in marine environments, contributing to operational challenges, maintenance issues, and reduced onboard comfort.

The GreenTRAP™ VOLT 320 is an advanced passive/active Diesel Particulate Filter (DPF) system designed for marine diesel engines, delivering reliable and high-efficiency particulate emissions control.

The system integrates a wall-flow DPF with electrically assisted regeneration, allowing automatic self-cleaning without relying solely on engine exhaust temperature. A proprietary catalyst coating on the filter walls lowers the regeneration temperature, enabling passive regeneration under favorable operating conditions and reducing the frequency of active regeneration.

When passive conditions are not sufficient, active regeneration is initiated using integrated electric heater coils, increasing exhaust temperature to safely oxidize accumulated soot.

An Electronic Control Unit (ECU) continuously monitors system parameters including temperature, pressure, and exhaust mass flow rate in real time, ensuring optimized regeneration performance and reliable operation. The system also provides continuous diagnostics and alerts the operator in case of malfunction.

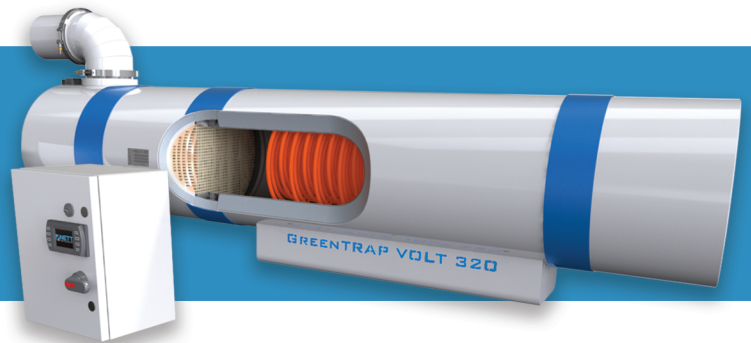
The system delivers up to 99% reduction in particulate matter (PM), up to 96% reduction in carbon monoxide (CO), and up to 94% reduction in hydrocarbons (HC), including associated volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

Customized to fit specific vessel applications, the GreenTRAP™ VOLT 320 provides full control over emissions while improving engine performance, reducing maintenance, and enhancing overall system reliability.

GreenTRAP™

Volt 320

Active Diesel Particulate Filter



scan and learn



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.

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GreenTRAP™ VOLT 320 PRODUCT OVERVIEW

How does the VOLT 320 Active Diesel Particulate Filter work?

The system continuously monitors engine and exhaust conditions to determine when regeneration is required.

Exhaust gases pass through the wall-flow Diesel Particulate Filter (DPF), where particulate matter (soot) is captured within the porous filter structure.

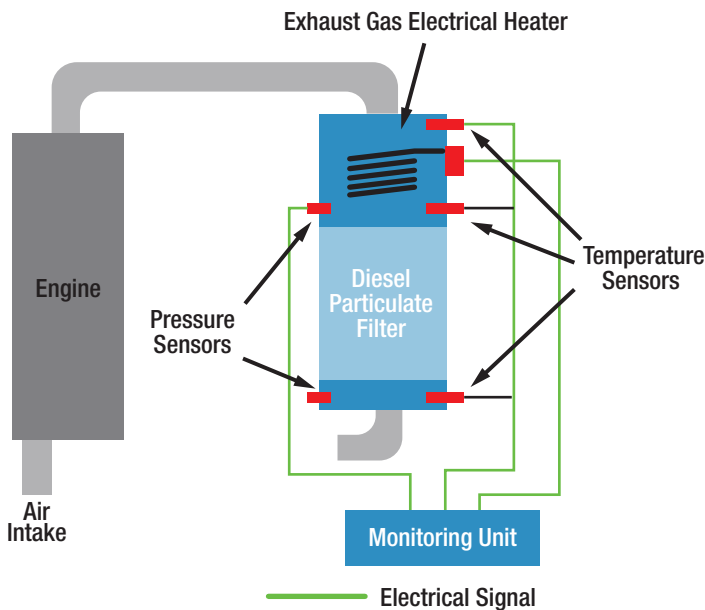
The DPF consists of parallel channels coated with a proprietary catalyst that lowers soot oxidation temperature, allowing passive regeneration at lower exhaust temperatures.

When exhaust temperature is insufficient, active regeneration is automatically triggered. The system uses electric heater coils to raise exhaust temperature in a controlled manner, enabling safe oxidation of accumulated soot within the filter.

The ECU evaluates inputs such as temperature, pressure, and exhaust flow to precisely control regeneration timing and performance.

Active regeneration uses excess generator power to increase exhaust temperature, ensuring reliable operation regardless of engine load conditions. A typical regeneration cycle takes approximately 20 minutes.

GreenTRAP™ VOLT 320 System Schematic Drawing

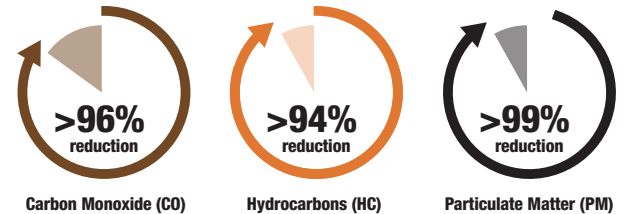


PRODUCT FEATURES

- Active system with electrically assisted regeneration
- Designed for marine engines (50 kW to 450 kW range)
- Automatic and manual regeneration modes
- Internally insulated design (no external blankets required)
- Advanced controller with customizable alarms and diagnostics
- Maintenance intervals of 2000–5000 hours
- Programmable regeneration with data logging capabilities
- Integrated display for real-time system monitoring
- Energy-efficient operation (~20-minute regeneration cycle)
- Load management feature to prevent generator overload

EMISSIONS REDUCTION PERFORMANCE

Typical GreenTRAP™ VOLT 320 Emissions Reduction Performance



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Contact Nett Technologies Inc. today at:

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or visit us online at www.nettinc.com