Diesel emission control has never been easier!

Diesel engines are an excellent power source with the exception of their emissions. Particulate Matter (PM)/soot and Oxides of Nitrogen (NOx) are significant contributors to air pollution causing negative environmental and health impacts worldwide. Nett Technologies' BlueMAX™ PLUS 100 is a customizable Selective Catalytic Reduction (SCR) and passive Diesel Particulate Filter (DPF) system designed to control PM and NOx emissions from medium and heavy-duty diesel engines in off-road applications.

In the BlueMAX™ PLUS 100 system, the DPF utilizes wall-flow monoliths to trap the soot produced by diesel engines. 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 by oxidizing the accumulated soot inside the filter during regular operation of the engine. The system requires Ultra-Low Sulfur Diesel (ULSD) fuel and exhaust gas temperature above 325°C (617°F) for at least 25% of the normal duty cycle to ensure proper filter regeneration.

NOx is reduced over the SCR catalyst through a chemical reaction with urea agent which is also commonly referred to as Diesel Exhaust Fluid (DEF). The urea control strategy relies on NOx concentration measurements by a sensor positioned upstream of the SCR catalyst. Based on the NOx sensor signal, in combination with the engine Mass Air Flow (MAF) and temperature sensors, the Electronic Control Unit (ECU) calculates the amount of urea that needs to be injected for optimal NOx reductions. The BlueMAX™ PLUS 100 on-board diagnostic unit continuously monitors and measures the performance of all system sensors and components. In addition, it will inform the operator of system status and potential issues via the dashboard indicator.

The BlueMAX™ PLUS 100 is verified by United States Environmental Protection Agency (EPA) for diesel engines certified to Tier 1, Tier 2 and Tier 3 with a rating at 100-750hp (75-560 kW) in off-road applications. The system reduces greater than 95% of Carbon Monoxide (CO), 60% of Hydrocarbons (HC), 85% of Nitrogen Oxides (NOx) and 85% of Particulate Matter (PM).

The BlueMAX™ PLUS 100 system is an effective solution for all your off-road emission control needs. Contact Nett Technologies today to see how we can assist you with all your emission control requirements.

BlueMAX™ PLUS 100

SCR and passive DPF system

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.

NETT® TECHNOLOGIES INC.

...the emission control authority.

www.nettinc.com

BlueMAX™ PLUS 100 PRODUCT OVERVIEW

How does the BlueMAX™ PLUS 100 system work?

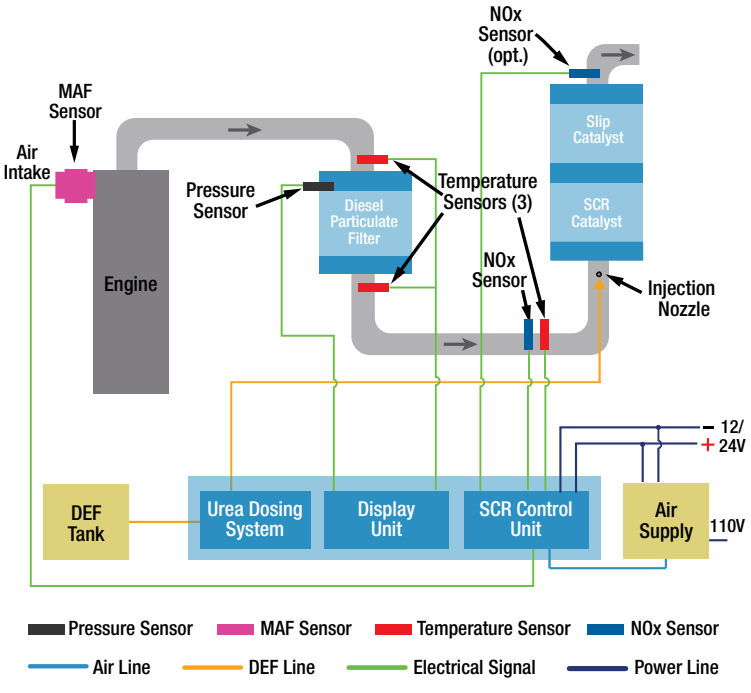
In the BlueMAX™ PLUS 100 system, the Diesel Particulate Filter (DPF) utilizes wall-flow monoliths to trap the soot produced by diesel engines. A proprietary catalyst is coated onto the inside surface of the filter monolith. The catalyst lowers the soot combustion temperature allowing the filter to regenerate by oxidizing the accumulated soot inside the filter during regular operation of the engine. The system requires Ultra-Low Sulfur Diesel (ULSD) fuel and exhaust gas temperature above 325°C (617°F) for at least 25% of the normal duty cycle to ensure proper filter regeneration.

NOx is reduced over the Selective Catalytic Reduction (SCR) catalyst through a chemical reaction with urea agent which is also commonly referred to as Diesel Exhaust Fluid (DEF). The urea control strategy relies on NOx concentration measurements by a sensor positioned upstream of the SCR catalyst. Based on the NOx sensor signal, in combination with the engine Mass Air Flow (MAF) and temperature sensors, the Electronic Control Unit (ECU) calculates the amount of urea that needs to be injected for optimal NOx reductions.

The NOx sensor-based control strategy makes the system very suitable for all type of applications. System calibration (i.e. engine mapping) is not required and the system can be installed on a wide range of diesel engines, both mechanically and electronically controlled. Urea (in the form of a 32.5% water-based solution) is metered by a computer controlled dosing pump into the exhaust pipe upstream of the SCR catalyst through an injection nozzle.

Compressed air is used to atomize the urea for optimum dispersion, to maximize the NOx reductions and minimize the amount of urea required. The on-board diagnostic unit monitors all system parameters in real time and will inform the operator of system status and potential issues via the dashboard display. The system reduces greater than 95% of Carbon Monoxide (CO), 60% of Hydrocarbons (HC), 85% of Nitrogen Oxides (NOx) and 85% of Particulate Matter (PM) from the diesel exhaust.

BlueMAX™ PLUS 100 System Schematic Drawing



PRODUCT FEATURES

- SCR and passive DPF system
- Engineered to install into tight engine compartment
- Durable design with quiet operation
- Internally insulated
- Computerized controller with 3 customizable alarms
- System maintenance intervals of 2000 to 5000 hours
- Data logging capabilities
- Colour display informing of system status and operational conditions

EMISSIONS REDUCTION PERFORMANCE

Typical BlueMAX™ PLUS 100 Emissions Reduction Performance