

# Diesel emission control has never been easier!

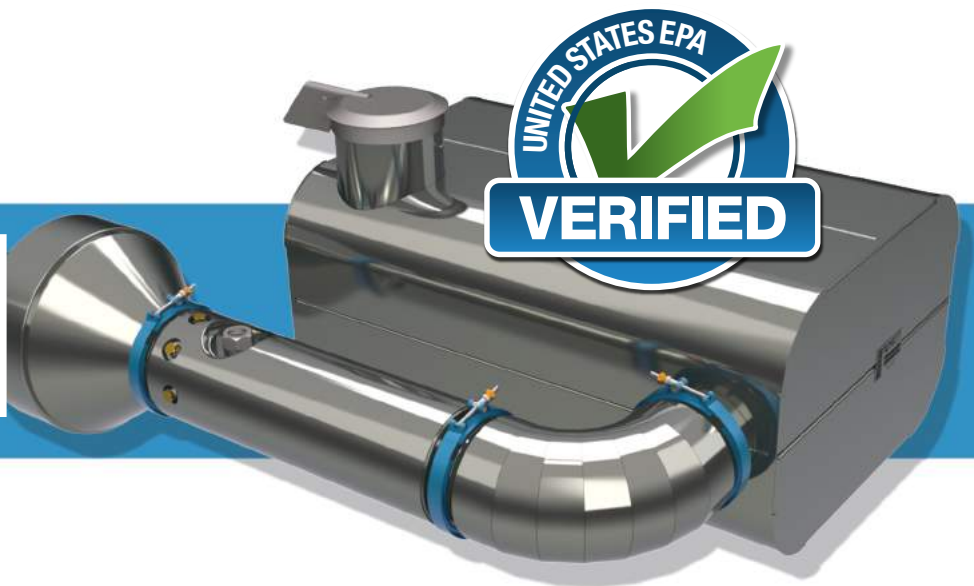
Diesel engines are an excellent power source, with the exception of their emissions. Particulate Matter (PM)/soot and Oxides of Nitrogen (NOx) are significant contributors to air pollution causing negative environmental and health impacts worldwide.

The BlueMAX™ 300d is a NOx control system that is designed for medium to heavy duty diesel engines in stationary applications. It consists of a Diesel Oxidation Catalyst (DOC) upstream of a Selective Catalytic Reduction (SCR) system and typically provides a reduction in NOx emissions in the range of 65 to 90% under transient diesel engine conditions and over 90% in steady-state operation.

In the BlueMAX™ 300d system, NOx is reduced over the SCR catalyst through chemical reaction with diesel exhaust fluid (DEF). The SCR sub-system consists of a SCR catalytic converter, a DEF dosing unit, and a DEF tank (see diagram). The DEF 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 an engine mass air flow sensor and temperature sensors, the electronic control unit (ECU) calculates the amount of urea which needs to be injected for optimum NOx reduction. The NOx sensor-based control strategy makes the system very suitable for both original equipment and retrofit 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.

The Nett Technologies' BlueMAX™ 300d ECU continuously monitors and measures the performance of all system sensors and components. In the event of malfunction, the ECU will indicate the existence of a problem to the operator via the system display. In addition to 65-90% NOx reduction, the system also provides a reduction in Particulate Matter (PM) greater than 25%, Carbon Monoxide (CO) greater than 97%, and Hydrocarbons (HC) greater than 99% from the engine exhaust.

## BlueMAX™ 300d SCR system



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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.

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## BlueMAX™ 300d PRODUCT OVERVIEW

The Nett Technologies' BlueMAX™ 300d system is designed to control the emissions of NOx from medium and heavy duty diesel engines in stationary applications. In selective catalytic reduction (SCR) technology, Oxides of Nitrogen (NOx) is reduced over the SCR catalyst through chemical reaction with a reducing agent, either ammonia (NH3) or urea. For safe and easy handling the BlueMAX™ 300d system utilizes urea for its operation.

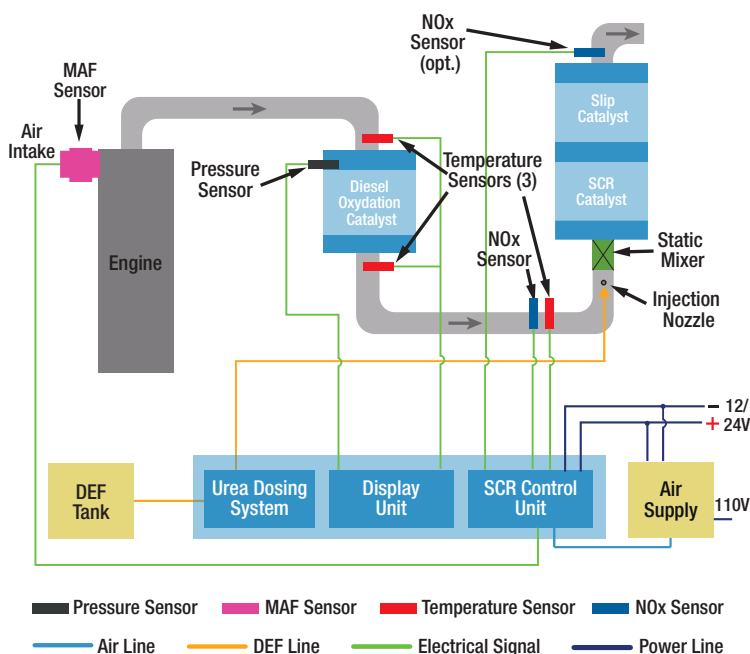
The main components of the BlueMAX™ 300d system include the SCR catalytic converter, the computerized urea dosing system (UDS), diesel oxydation catalyst (DOC) and the urea tank (see diagram). The urea control strategy relies on NOx concentration measurements by a sensor positioned upstream of the SCR catalyst. Based on the NOx sensor signal in combination with an engine air mass flow sensor and temperature sensors, the computer calculates the amount of urea which needs to be injected for optimum NOx reductions.

The NOx sensor-based control strategy makes the system very suitable for both original equipment and retrofit 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 from the air brake line or a standalone air compressor is used to atomize the urea for optimum dispersion, to maximize NOx reduction and to minimize the amount of urea required.

The BlueMAX™ 300d utilizes a precious metal coated DOC upstream of the SCR 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. The BlueMAX™ 300d system is verified by US Environmental Protection Agency (EPA) for medium and heavy duty diesel engines in stationary applications.

### BlueMAX™ 300d System Schematic Drawing

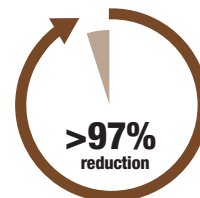


## PRODUCT FEATURES

- SCR and DOC system
- Ideal for engines with an overall output of 50kw to 450kw
- Optional computerized controller with 3 customizable alarms and data logging capabilities
- System maintenance intervals of 2000 to 5000 hours
- Data logging capabilities
- Colour display informing of system operational conditions and status
- Stainless steel housing, custom fit available

## EMISSIONS REDUCTION PERFORMANCE

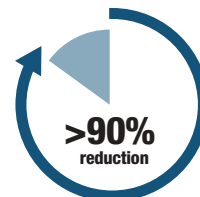
### Typical BlueMAX™ 300d Emissions Reduction Performance



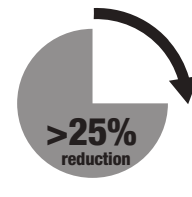
Carbon Monoxide (CO)



Hydrocarbons (HC)



Nitrogen Oxides (NOx)



Particulate Matter (PM)



...the emission control authority.

Contact Nett Technologies Inc. today at:

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