Your LSI engine emission control just got easier!

The BlueCATTM 300 is a Retrofit Emissions Control System which has been verified by the California Air Resources Board (CARB) for installation on uncontrolled gaseous-fueled Large Spark-Ignition (LSI) engines. BlueCATTM 300 systems control exhaust emissions and noise from industrial forklift trucks, floor care machinery, aerial lifts, ground support equipment, and other spark-ignition rich-burn (stoichiometric) engines. Nett Technologies' BlueCATTM 300 practically eliminates all of the major exhaust pollutants: Carbon Monoxide (CO) and Oxides of Nitrogen (NO_X) emissions are reduced by over 90% and Hydrocarbons (HC) by over 80%.

BlueCAT[™] 300 three-way catalytic converters consist of a high-performance emissions control catalyst and an advanced electronic Air/Fuel Ratio Controller. The devices work together to optimize engine operation, fuel economy and control emissions. The controller also reduces fuel consumption and increases engine life.

Nett's BlueCAT[™] 300 catalytic muffler replaces the OEM muffler simplifying installation and saving time. The emission control catalyst is built into the muffler and its size is selected based on the displacement of the engine. Thousands of direct-fit designs are available for all makes/models of forklifts and other equipment. The BlueCAT[™] 300 catalytic muffler matches or surpasses the noise attenuation performance of the original muffler with the addition of superior emissions reduction performance.







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.



BlueCAT™ 300 PRODUCT OVERVIEW

How does the BlueCAT™ 300 work?

The BlueCAT[™] 300 system consists of a 3-way catalytic converter/muffler and a digital Air/Fuel (A/F) Ratio Controller. The entire system is designed for quick and easy installation:

- an oxygen sensor port is built into the converter/muffler
- the self-diagnostic A/F Controller comes complete with all wiring and connectors
- comprehensive instructions, refined by hundreds of installations, are included

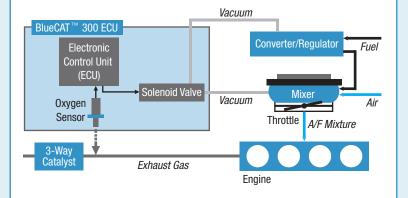
The BlueCAT $^{\text{TM}}$ 300 A/F ratio controller is a closed-loop system and includes a zirconium oxygen (O_2) sensor, fuel system control solenoid, and monitor. The A/F controller receives a feedback signal from the O_2 sensor and modulates the solenoid to maintain the engine A/F ratio at the stoichiometric point, thereby maximizing catalyst performance.

The fundamental reactions in a 3-way catalyst are between Carbon Monoxide (CO) and Hydrocarbons (HC) on one side and Oxides of Nitrogen (NO $_{x}$) on another. To achieve high conversions of all three emissions simultaneously, the air/fuel ratio must be at the stoichiometric ratio. Simply, this means the amount of CO and HC are in proportion with the amount of NO $_{x}$ present in the exhaust – these gases combine to form Water, Nitrogen and Carbon Dioxide.

The BlueCAT $^{\text{TM}}$ 300 Electronic Control Unit (ECU) is packaged in a rugged metal enclosure suitable for dash or engine compartment installation. The controller incorporates an onboard diagnostic system, which allows constant monitoring of the operation and simplifies set-up. The combination of lights built directly into the unit provides an indication of controller operation without the need for additional monitoring tools. The diagnostic functions include a power and failure light, a warm-up and O_2 sensor light, and a set of lights to monitor the percentage of A/F ratio modulation. It also includes a dashboard-mountable warning light to alert the operator in case of system failure and to prevent the release of excessive emissions.

With its high performance and low cost, the BlueCAT[™] 300 system is an ideal emission control solution for the construction, material handling, and utility industries. Contact Nett Technologies today at (905) 672-5453 or sales@nettinc.com to learn more about this product.

BlueCAT™ 300 System Schematics Drawing



PRODUCT FEATURES

- California Air Resource Board (CARB) verified system
- Ideal for LPG, CNG and gasoline engines used in off-road equipment (e.g. forklifts, tractors, etc.)
- Includes an Air/Fuel Ratio controller that maximizes the emissions reduction
- Includes the On-Board diagnostic system that provides constant system monitoring
- Direct-Fit muffler replacement simplifies the installation and saves time
- Matches or surpasses the original muffler in sound attenuation and backpressure characteristics with the addition of superior emissions performance
- Made of heavy aluminized steel to increase the typical life expectancy of its original replacement

EMISSIONS REDUCTION PERFORMANCE Typical BlueCAT™ 300 Emissions Reduction Performance >90% reduction Carbon Monoxide (CO) Hydrocarbons (HC) Nitrogen Oxides (NO_x)

