



EMISSIONS SOLUTIONS
FOR INDUSTRIAL ENGINES

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MIRATECH Receives PCT Acceptance For V-CAT Diesel Oxidation Catalyst

Tulsa, OK — MIRATECH Corporation, one of the nation's leading designers and manufacturers of emission control products, has been notified that the Patent Cooperation Treaty (PCT) application submitted for its V-CAT® catalyst has been accepted. Acceptance of the PCT opens the door to and simplifies the process for subsequent international patent filings.

Under the PCT, MIRATECH, by filing a single international patent application in one language with one patent office, will streamline the process for seeking protection for its V-CAT design in up to 117 countries throughout the world.

“This is a huge step in our being able to take the V-CAT technology into the international market place with peace of mind that our intellectual property rights can be protected,” said Bill Clary, MIRATECH CEO. “We’ve had outstanding success with V-CAT domestically, given its ability to provide operators of EMD diesel engines used to power locomotives, gensets, and marine vessels the means to meet—and exceed— EPA Tier 0, 1, and 2 standards for exhaust emissions. We’re excited about taking that success worldwide, and this moves us forward toward doing so.”

The MIRATECH V-CAT catalyst/exhaust manifold system addresses a number of engineering challenges that have hampered previous emission control efforts, according to Jonathan Roberts, MIRATECH Sales Manager for Locomotive and Marine Markets.

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“When designing a Diesel Oxidation Catalyst (DOC) for use in EMD-powered locomotives and commercial marine vehicles, engineers have to deal with limited space behind the turbocharger; exhaust gas temps that are too low for effective DOC performance; and the risk of exceeding the low exhaust back pressures EMD engines need to operate efficiently,” Roberts explained. “We’ve addressed those in V-CAT by, first, integrating the catalyst directly into the exhaust manifold before the turbocharger with a design configuration that keeps open access to all areas — including the EMD valve covers — needed for regular service and maintenance. At the same time, because gases are hotter upstream from the turbocharger, integrating the V-CAT into the exhaust manifold effectively addresses the issue of low exhaust gas temps. And finally, our customers said they wanted a system that was simple in design; with V-CAT’s Plug and Play design, it could not be much simpler.”

V-CAT’s efficacy was proven in a 14-month in-service field test, after which the unit was inspected and emissions tested at Southwest Research Institute (SwRI). The inspection found no mechanical issues and emission reductions of 49% PM, 75% HC and 82% CO based on the EPA line-haul cycle measured.

In January, MIRATECH announced that the U.S. Environmental Protection Agency (EPA) has included the V-CAT in the National Clean Diesel Campaign’s Emerging Technology List for marine applications, qualifying the V-CAT for inclusion in requests for funding through the EPA Clean Diesel program.

MIRATECH Corporation is a Tulsa, Oklahoma-based leader in providing environmentally sound emission solutions for users of industrial engines throughout the Western Hemisphere. Current products offered include: NSCR and SCR catalyst systems; silencers; diesel particulate filters (DPF); control systems for active DPF regeneration, NO_x control, and air/fuel ratio controllers; exhaust components, VOC systems, training programs; and technical field service.

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Artwork Supplied:



MIRATECH Logo.jpg (Approx. 4.25" x 1" @ 300 dpi (RGB))



MIRATECH V-CAT EMD12.jpg (Approx. 3.5" x 2.2" @ 300 dpi (RGB))

Suggested cutline:

A Patent Cooperation Treaty (PCT) application submitted for the MIRATECH V-CAT® catalyst / exhaust manifold system has been accepted. Acceptance of the PCT opens the door to and simplifies the process for subsequent international patent filings



MIRATECH V-CAT.jpg (Approx. 4.3" x 5" @ 300 dpi (RGB))

Suggested cutline:

The compact MIRATECH V-CAT® integrates emissions reduction directly into the EMD exhaust manifold, within the existing footprint.