

Developing leading edge catalyst technology for Diesel Exhaust Systems



# MinNoDOC

AirFlow Catalyst Systems delivers high-performance technologies and customized solutions. Our MinNoDOC Diesel Oxidation Catalyst offers unique performance and great value for a wide range of equipment.

Diesel Oxidation Catalysts (or DOC's) are used to oxidize Carbon Monoxide (CO), Hydrocarbons (HC), and some Particulate Matter (PM) that are all typically found in diesel engine exhaust. Most catalysts that are good at oxidizing these components also oxidize Nitrogen Monoxide (NO) to the more harmful, undesired compound of Nitrogen Dioxide (NO<sub>2</sub>).

AirFlow Catalyst Systems MinNoDOC offers excellent oxidation performance with the added benefit of NO<sub>2</sub> control, resulting in  $NO_2$  levels below those coming out of the engine.



# MinNoDOC: Proven Performance

The data above was taken when MinNoDOC was tested by an independent third-party. As shown in the graphs above, the MinNoDOC reaches 90% conversion of CO above 200°C and 65% reduction of engine out  $NO_2$  for each of the eight modes of the engine operation. At higher temperatures, MinNoDOC is able to keep  $NO_2$  levels minimized where others cannot. MinNoDOC is ideal for operation in confined spaces where ventilation can be challenging.

Product features:

- MinNoDOC performance is optimized for the target operating range of 200°C to 500°C
- Wide variety of shapes, sizes, cell densities, and materials available



- Available diameters from 3 to 47 inches
- Substrate made of metal (with and without mantle).

## Load Haul Dump Test Cycle Results



 $NO_2$  reduction begins at 150°C and is the lowest where the engine operates the most for this drive cycle (approx 200°C— 340°C).

Performance is optimal for complete removal of CO at 270° C and above.





During most of the engine operating conditions, the MinNoDOC reduces hydrocarbons by approximately 60%.

## The AirFlow Difference:

### **Industry Leading Services:**

- Customer Service Focus
- Technical Support
- Customized Solutions
- Retrofit Expertise
- Engineering Expertise
- Coating Expertise

### **Industry Leading Products:**

- MinNoCat: CDPF w/NO2 Control
- EZCat: *Low Temp CDPF*
- EZDOC<sup>™</sup>: Low Temp DOC
- Custom Coatings: *Wide range of capabilities*

For more information, please contact

space.

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Customized solutions available, such as this MinNoDOC designed and built for a CAT

Loader with limited flexibility in available

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