





MINE-X SOOTFILTER® Diesel Particulate Filters for industrial applications



www.dcl-inc.com



DCL's MINE-X SOOTFILTER®

DCL's diesel particulate filters effectively reduce particulate matter and black smoke from diesel engine exhaust. The MINE-X SOOTFILTER line of DPFs is used to meet MSHA standards for particulate matter in underground mines, EPA or CARB level 3 standards for particulate reduction in diesel vehicle retrofits or simply to improve air quality around diesel engines. A vehicle or engine fitted with a DCL diesel particulate filter operates normally, using only the heat in the exhaust gas to continuously burn off particulates.

With thousands of installations worldwide, DCL diesel particulate filters are the industry standard for long, reliable operation. Product approvals include VERT, Japan MLIT, and Sweden Environmental Zones.

DCL diesel particulate filters work best in Tier 1 or higher diesel engines, in applications such as construction, earthmoving, mining vehicles and stationary engines. Contact DCL to determine the suitability of a DCL filter for other applications.

CONSTRUCTION AND DESIGNS

All DCL hardware is specifically designed for the most extreme duty applications. MINE-X SOOTFILTERs are available with virtually any type of connection, including pipe, tube and ANSI or DIN flanges.

With proper installation and maintenance DCL's MINE-X SOOTFILTERs last for years in the most extreme duty environments.



STANDARD DESIGNS

DCL's standard designs use quick-release clamps and a modular design concept which greatly facilitates routine cleaning and servicing.



CUSTOM ENGINEERED DESIGNS

For larger diesel engines, multiple filter elements are integrated into DCL's highly customizable header or housing designs. The use of multiple elements allows the design to meet any backpressure target and also provides easy access for service or replacement of filter elements.



HOW IT WORKS

The catalytically-coated ceramic monolith contains long narrow channels open at one end and blocked at the other. The exhaust gas is forced to escape by passing through the filter walls, trapping particulate matter (soot) in the filter.

At a high exhaust gas temperature, the soot particles burn away and transform into carbon dioxide. The filter also destroys carbon monoxide (CO) and diesel hydrocarbons (HC).

BASIC REACTIONS

$$\begin{array}{ccccc} C & (soot) + O_2 & & & & & & \\ CO & + V_2 & O_2 & & & & & \\ C_x & H_y + O_2 & & & & & \\ \end{array}$$

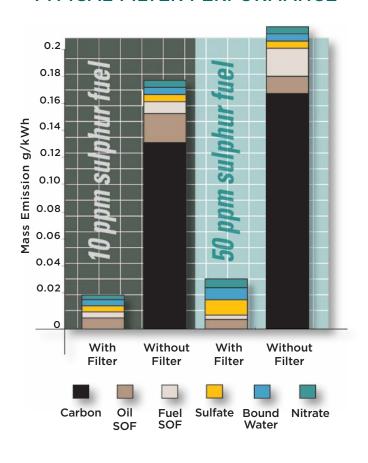
EXHAUST MONITORING SYSTEM

DCL's state-of-the-art exhaust monitoring system is an included component of the MINE-X SOOTFILTER DPF system.

- Monitors pressure & temperature and alerts the operator if either exceed the set values
- The display face is mounted in the operator's cabin and gives a clear visual status of the DPF.
- Meets CARB/EPA/VERT data logging standards
- Contains a large memory card for keeping a long-term record of the vehicles operating conditions
- Optional remote connectivity features (GSM, GPRS and GPS).



TYPICAL FILTER PERFORMANCE





The Global Leader in Emission Control

For the past 3 decades DCL has dedicated itself to the design and manufacture of superior emission control systems. With over 200 employees, 6 manufacturing facilities and 5 warehouses in 5 countries, we are committed to our customers.

We are proud to be ISO 9001:2008 certified for our registered research, design and manufacturing. Our core strengths are designing, engineering and manufacturing emission control devices for gas compression, power generation and pumping applications.

Our vertically integrated approach to product development provides highly customized solutions, shorter lead times, and greater quality control, translating to outstanding performance, longer product life and lower cost of ownership for our customers.



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