## Catalyst Elements

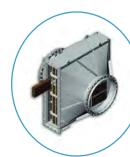




# Metallic Catalyst Elements for Superior Emissions Performance

For over 20 years, DCL has been providing superior quality and innovative emission solutions to various industries. DCL's Metalcor® thin-walled metallic catalyst elements provide advanced emission control solutions in a broad variety of designs and configurations.

#### If you are a plant operator...



A stationary engine or other emission source out of emission compliance can mean plant closure and fines. As such, DCL offers fast deliveries for a variety of sizes and configurations of catalyst elements, including direct replacement parts for most other manufacturers. Most parts are in stock and can be shipped right away.

#### If you are a catalyst packaging or canning company...



DCL's advanced, high-volume and flexible manufacturing facility allows us to produce customized, yet economical solutions for the most demanding standards of design, performance and quality control. Our expert application engineering support helps you through the process of selecting the right configuration and PGM loading to ensure you get the best solution for your application.

DCL experience and expertise extends to a variety of fuels and applications, including:



- · Heavy-duty off-highway
- Light-duty on-highway and off-highway
- Stationary engines
- · Process industry emission
- Turbine emission
- Boiler emission

Metalcor® catalyst elements are effective in control of volatile organic compounds (VOCs) in incineration, soil remediation, food processing and many other process industries.

## **General**

## **Specifications**

- Thin-walled metal cell structures available from 50 to 500 cells per square inch, opti mized for emissions performance and pres sure drop
- Support structure durable to temperatures in excess of 1100 °C
- Catalyst coatings available in lean-burn oxida tion, diesel oxidation and three-way catalyst formulations, in a variety of PGM loadings
- Non-brazed design for light duty and station ary applications (patent pending)
- Brazed design for heavy duty applications with high thermal and mechanical stress



The thin-wall metal honeycomb structure provides high surface area with minimal pressure drop (patent pending).

## **Catalyst Formulation Options**

### Three-Way Catalysts

Three-way catalysts



are used in rich-burn or stoichiometric engines for simultaneous conversion of oxides of nitrogen  $(NO_x)$ , carbon monoxide (CO), hydrocarbons (HC), formaldehyde  $(CH_2O)$  and other EPA classified Hazardous Air Pollutants (HAPs). A closed loop air-fuel ratio controller is required for the three-way catalyst to work effectively.

#### **Oxidation Catalysts**



Oxidation catalysts are effective for the control of carbon monoxide (CO), non-methane hydrocarbons (NMHC), volatile organic compounds (VOC), formaldehyde (CH<sub>2</sub>O) and other EPA classified Hazardous Air Pollutants (HAPs).

## Diesel Oxidation Catalysts

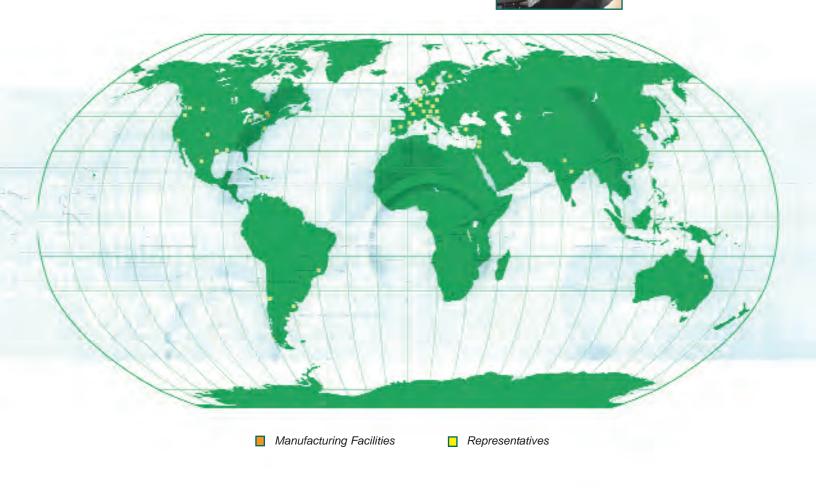


Diesel oxidation catalysts Diesel (DOCs) are effective for the control of carbon monoxide (CO), hydrocarbons (HC), odor causing compounds, and the soluble organic fraction (SOF) of particulate matter (PM<sub>10</sub>).

## DCL International Inc. - Preserving and Improving the Quality of the Air We Breathe

DCL International Inc. is a global leader in the engineering, manufacturing and supporting of advanced emissions control technology for stationary and mobile industrial engines. Our products include oxidation and three-way catalytic converters, catalytic mufflers, diesel particulate filters, stock mufflers and VOC abatement catalysts. Established in 1986, DCL provides innovative solutions for controlling engine exhaust emissions to the mining, tunnelling, construction, material handling equipment, power generation, co-generation, and gas compression markets.

To meet the specialized needs of the emission control market, we adopt an integrated approach, bringing together product development, design, manufacturing and testing all under one roof. This single-source capability enables us to provide better engineered emissions solutions that deliver outstanding performance, longer life and lower cost of ownership. Our superior product quality has made DCL the choice of customers around the world.





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