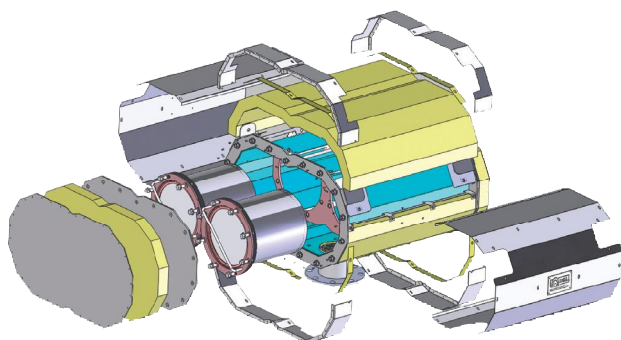
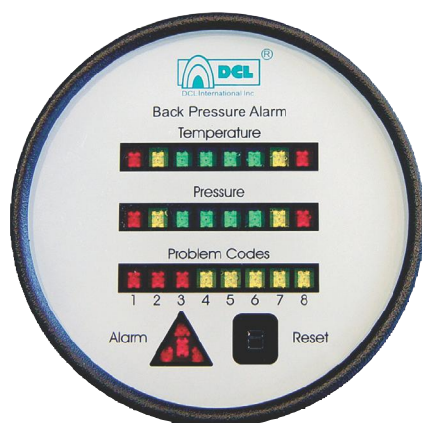




DECS is designed for easy installation in the engine room.



The DECS mounting kit ensures ease of installation and maintenance.



The fully-featured monitoring system provides a real-time window into your DECS status and function



Northern Lights, Inc. is pleased to offer DECS- a solution for the removal of soot and particulate matter associated with marine diesel powered equipment.

Based on DCL International's revolutionary MARINE-X™ system, DECS removes particles that are emitted from the engine. Air and water quality in and around the vessel are improved, offering a clean, enjoyable environment for everyone onboard. Engineered to be application specific, DECS fits virtually any engine room configuration. DECS meets or exceeds the sound attenuation of most standard engine mufflers.

When equipped with DECS, your Northern Lights generator set operates as normal, with heat from the engine exhaust continually burning off particulate matter. Exhaust gas is routed through a catalytically coated ceramic filter, which traps soot while keeping the filter free of restrictions. At a conservatively rated exhaust gas temperature of 300°C, the soot burns away and transforms into harmless carbon dioxide (CO<sub>2</sub>).

The modular steel housing and removable elements are durable enough for the harsh marine environment, while providing easy access for standard service work. Its polished exterior is 304-stainless steel to maintain a low surface temperature while complementing the engine room.

DECS includes a fully-featured monitoring system with a large, easy to read analog display. The monitor records engine exhaust temperature and back pressure and meets or exceeds CARB/EPA/VERT data logging standards.

DCL International's emissions control technology is in use worldwide. Northern Lights is a leader in marine power and propulsion. Together, DECS provides the peace of mind that comes from installing the highest quality products.

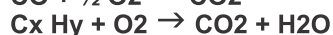
# DECS Diesel Exhaust Cleaning System

## DECS - How It Works

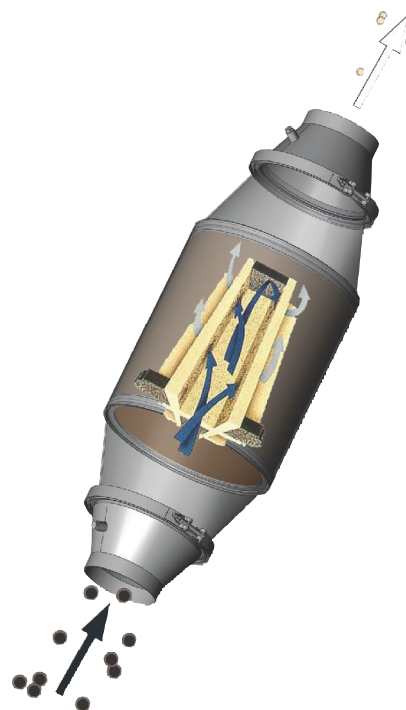
The exhaust gas is forced through a catalytically coated ceramic filter, trapping the particulate matter (soot). At a high exhaust gas temperature, the soot particles burn away and transform into harmless carbon dioxide.

The filter also reduces carbon monoxide (CO) by up to 98% and diesel hydrocarbons (HC) by up to 95%.

### BASIC REACTIONS



MARINE-X™ systems are manufactured by DCL International, Inc., a global leader in emission control technology for over 25 years.



Features	Benefits
CARB Level 3 verified	Meets California Airborne Toxic Control Measure for Stationary CI Engines (>85% PM conversion efficiency; CARB NO2 compliant).
Passive catalytic regeneration of diesel particulates	<ul style="list-style-type: none"><li>• Eliminates unscheduled downtime for DPF regeneration.</li><li>• No external power source required.</li><li>• No burners or electric heaters required.</li><li>• Lower cost of ownership.</li></ul>
Excellent sound attenuation	Meets or exceeds the sound attenuation of most standard engine mufflers.
Custom engineering	Custom designs and kits available for quick and easy installation.
Modular stainless steel housing with removable filter elements	<ul style="list-style-type: none"><li>• Designed for the most extreme duty applications.</li><li>• Allows easy servicing and ash removal.</li></ul>
State-of-the-art monitoring system and display panel	<ul style="list-style-type: none"><li>• Provides a clear visual status of the DECS condition.</li><li>• Can be tied into generator alarm panel.</li></ul>
Polished stainless steel exterior with insulated shell	<ul style="list-style-type: none"><li>• Low surface temperature.</li><li>• Marine grade aesthetics.</li></ul>



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