

# Emission Control Solutions



# **RICE NESHAP**

## Compliance

*Natural Gas | Diesel | Dual-Fuel*



# RICE NESHAP

Your compliance toolkit at a glance  
from the leader in emission control solutions...

Are you ready for RICE NESHAP? With the recent passing of the US EPA rule for reciprocating internal combustion engines to meet the national emission standards for hazardous air pollutants (commonly called the RICE NESHAP rule), many existing in-service engines will require retrofit with catalytic emission control.

When it comes to upgrading industrial engines in gas compression, power generation and co-generation, DCL is the world leader in engineered catalyst systems, with thousands of successful installations in North America, Europe and Asia.

DCL catalyst systems are specifically designed for long term, problem free operation under the harshest environments for heat, vibration and catalyst fouling. DCL experience not only includes modern high speed engines, but extends to old legacy engines, compressor integrals, engines with high oil consumption, and a wide variety of liquid and gaseous fuels.

In fact, we've engineered catalyst systems for just about every type of engine and application out there. When it comes to RICE NESHAP compliance, your company's environmental reputation is at stake. Call the worldwide experts who know how to do it right. Call DCL.



## CUSTOM ENGINEERED Catalytic Silencers

500 to 10,000 hp

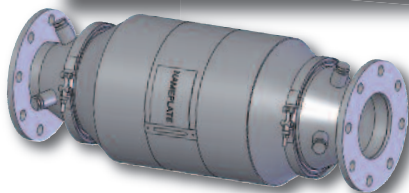
- Vertical catalytic silencers for site specific requirements
- Ground access for catalyst elements
- Engineered to fit directly into the exhaust system of an existing plant
- Designed for meeting site specific structural loads, including wind and stack
- Designed for site specific sound attenuation
- Available in stainless steel or mild steel
- Available with special surface coatings and insulation options



## MINE-X® Catalytic Converters

50 to 700 hp

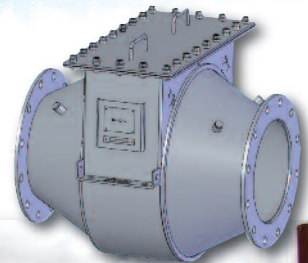
- High efficiency brazed metal catalyst elements
- Simple and effective v-clamp design for easy servicing
- Modular design easily accommodates more catalyst elements
- Heavy gauge stainless steel construction



## QUICK-LID® Catalytic Converters

300 to 3,000 hp

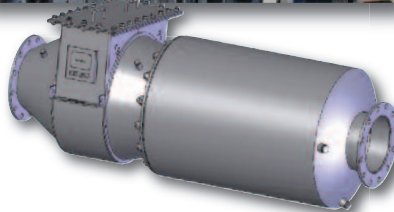
- Available with high efficiency brazed and non-brazed metal catalyst elements
- Stainless steel catalyst housings
- Fast delivery and easy servicing of catalyst elements
- Patented system for gasket-free sealing of catalyst elements





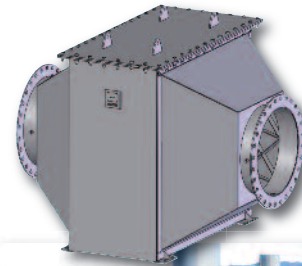
## QUICK-LID® Catalytic Silencers 300 to 3,000 hp

- Available with high efficiency brazed and non-brazed metal catalyst elements
- Stainless steel catalyst housings with integrated silencer
- Patented system for gasket-free sealing of catalyst elements
- Available in industrial, critical and hospital grade silencing options



## RC™ Catalytic Converters 3,000 to 10,000 hp

- Custom engineered reactor housings for large stationary engines
- Available in mild and stainless steel options
- Engineered for site specific installations
- Available in top and side load options for catalyst elements



## CATALYST MONITOR Exhaust Logging

- Ensures compliance with RICE NESHAP monitoring regulations
- Software comes factory set; no setpoint entry or programming required
- Multi-channel monitoring, including temperature and pressure drop
- Modbus RS-485 communications protocol
- Extract data to laptop computer for detailed analysis
- Complete kit, including sensors, fittings and NEMA 4 enclosure

## METALCOR® Catalyst Elements All Sizes

- Manufactured by DCL, the leader in catalyst elements for stationary engines
- Metal substrates, brazed and non-brazed designs
- Available in any customer specified shape and size
- Most models in stock in the USA and available right away



## Summary of RICE NESHAP Emission Standards for 2013\*

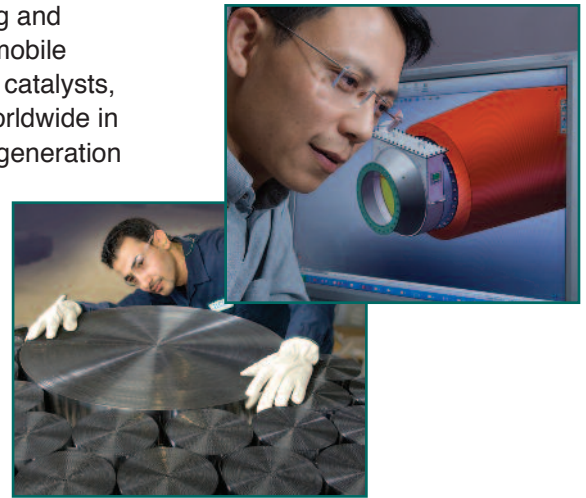
Engine Type	Source	Standard
Spark Ignited 2SLB	Area Source	Management Practices
	Major Source, 100-500 hp	225 ppmv CO
Spark Ignited 4SLB	Area and Major Sources, > 500 hp	47 ppmv CO or 93% CO reduction
	Major Source, 100-500 hp	47 ppmv CO
Spark Ignited 4SRB	Area Source, > 500 hp	2.7% ppmv CH <sub>2</sub> O or 76% CH <sub>2</sub> O reduction
	Major Source, 100-500 hp	10.3 ppmv CH <sub>2</sub> O
Compression Ignited, non-emergency, 100-300 hp	Area and Major Sources	230 ppmv CO
Compression Ignited, non-emergency, 300-500 hp	Area and Major Sources	49 ppmv CO or 70% CO reduction
Compression Ignited, non-emergency, > 500 hp	Area and Major Sources	23 ppmv CO or 70% CO reduction
Compression Ignited, emergency	Area and Major Sources	Management Practices

\*For complete details, contact DCL or refer to US EPA literature for 40 CFR, Part 63, Subpart ZZZZ.

# 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 – which include oxidation and three-way catalysts, silencers, particulate filters, SCR systems and accessories – are used worldwide in the material handling, construction, mining, gas compression and power generation markets.

DCL's dedicated industrial focus is unique in the emissions control industry. To meet the specialized needs of the industrial 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.



## Head Office

DCL International Inc.  
241 Bradwick Dr.  
Concord, ON L4K 1K5  
Canada

Tel: 1-905-660-6450  
Toll Free: 1-800-872-1968  
Fax: 1-905-660-6435  
info@dcl-inc.com  
www.dcl-inc.com

**ISO 9001:2008 Registered**

## Regional Office – USA

DCL America Inc.  
1990 North California Blvd.  
8th Floor  
Walnut Creek, CA 94596  
U.S.A

Toll Free: 1-877-897-9759  
info@dclamerica.com  
www.dcl-inc.com

## Regional Office - Europe

DCL Deutschland GmbH  
Im Haindell 1  
65843 Sulzbach am Taunus  
Deutschland

Tel: 49-5149-207-488  
info@dcl-inc.de  
www.dcl-inc.de

