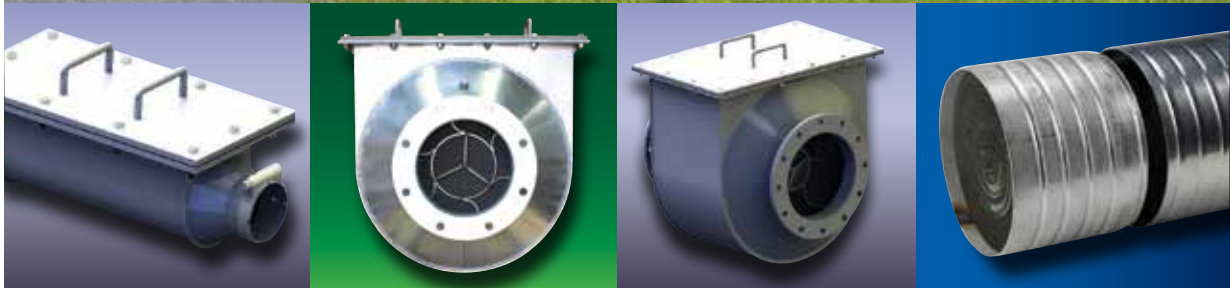


# Leading the way in diesel particulate treatment

**Exhaust Control Industries** Air and noise pollution control specialists



 Proud partners with the  
**NSW EPA** Clean Machine Program

**PREDATOR**<sup>TM</sup>  
PARTICULATE CATALYST

  
exhaust control industries  
AUSTRALIA



# Exhaust Control Industries

## Experts in emissions control

**Exhaust Control Industries (ECI) has become the recognised leader in air and noise pollution control in Australia.**

ECI has been developing innovative solutions for the safe and effective treatment of diesel engine emissions for over 30 years. Designed using unique and affordable technologies, our products are not only manufactured in Australia, but we are a 100% Australian-owned company. As a leader in the field, ECI provides cutting-edge emissions control solutions around the world.

ECI is committed to continuously improving the environment.

We are proud to offer this technology to improve air quality and further reduce greenhouse gas emissions worldwide.

**PREDATOR**<sup>™</sup>  
PARTICULATE CATALYST





# Why use ECI Predator?

## ECI Predator Benefits

- Reduces diesel smoke and Particulate Matter emissions by up to 70%.
- Simultaneous reduction of Carbon Monoxide by up to 95% and Hydrocarbons by up to 90%.
- No loss in engine power when correctly sized and fitted.
- 100% stainless steel structure.
- High resistance against thermal and mechanical shock loading.
- Easy to fit and integrate into existing exhaust systems.
- Ignition temperature as low as 200°C.
- Australian made to suit International Standards.
- Fraction of the cost of OE retrofit.
- Proven performance with many vehicles already fitted as part of the Diesel retrofit program in NSW.

With an **ECI Predator** fitted to your diesel engine, you can be confident you are contributing towards sustainable environmental best practice whilst protecting the health of personnel working in close proximity to the diesel engine.



Predator installation at RMIT Melbourne, Victoria.

**Customised solutions are available for all applications.**







# Diesel Exhaust Health Effects



We all want to live and breathe in a clean environment and reducing emissions from diesel engines is easily achievable thanks to the Predator Particulate Catalyst from Exhaust Control Industries. This highly effective device reduces diesel smoke and Particulate Matter emissions by up to 80 percent.



## Effects of Diesel Particulate Matter Emissions

The World Health Organisation says diesel engine exhaust fumes are carcinogenic and can cause cancer in humans.



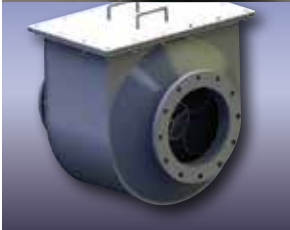
The International Agency for Research on Cancer has reclassified diesel exhausts to its group of substances that have definite links to cancer.

Some of the harmful components of diesel exhaust emissions components are:

- Diesel Particulate Matter (DPM) and elemental carbon (EC)
- CO
- NO and NO<sub>2</sub>
- CO<sub>2</sub>
- Hydrocarbons.

The fine carbon particles are small in size and easily inhaled. Typical areas of the body that are affected include the nose and throat area, windpipe, eyes and lungs.

The main culprit is the invisible soot – inhaled solid insoluble particles that penetrate deep into the lung and in a relatively short time interval cross into the blood and are carried to internal organs.



**Exposure to Diesel Exhaust can have immediate health effects**

Those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems.

- **Ozone (precursors, NOx and VOC)**  
eye and respiratory irritants, asthma exacerbation, bronchitis and irreversible lung damage.
- **Oxides of Nitrogen**  
respiratory irritant, immunosuppressant and asthma exacerbation.
- **Carbon Monoxide**  
headaches, irritability, impaired judgement and memory, breathlessness, aggravation of angina and other cardiovascular diseases, developmental toxicity and death.
- **Particulate Matter**  
Respiratory irritant with higher levels associated with increased incidence of cardiovascular and lung failure.



# ECI Predator Particulate Catalyst



## Why use ECI Predator Particulate Catalyst?

With more and more countries adopting emission legislation for new vehicles and those vehicles that have never been fitted with exhaust purification systems, demand for aftermarket and retrofit substrates and complete catalysts is rapidly increasing.

Exhaust Control Industries is the leading provider of Particulate Catalyst products for transport, mining and construction, power generation, marine and heavy duty retrofitting. ECI started manufacturing these products nearly 10 years ago before legislation was enacted.

The typical reduction of particulate matter from an ECI Predator Catalyst is up to 80 percent.

## ECI Predator Components

ECI Predator Particulate Catalyst works by effectively trapping and treating (by oxidation) Particulate Matter – so it doesn't escape into our atmosphere via the exhaust.

Highly successful in reducing diesel smoke and soot particulate emissions, the ECI Predator also treats poisonous carbon monoxide and smelly Hydrocarbons from vehicle exhaust.

High grade stainless steel construction, Predator features an open filter structure and fine, stainless steel screens that trap and oxidize diesel particulates while allowing a free flow path for the gas.

When you fit an ECI Predator, there is no compromise on performance, as an ECI Predator causes no loss in engine power (when sized and fitted correctly). Predator has been tried and tested on many vehicles operating on Australian roads, and is a significant part of the NSW EPA Clean Machine Program.

## Application

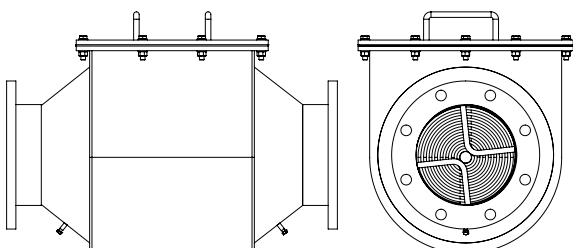
ECI Predator Particulate Catalyst is an open flow filter structure specifically developed to trap and oxidize Particulate Matter in LD & HD diesel vehicles such as

- gen sets
- marine engines
- trucks and buses
- underground and above ground mining
- tunnelling equipment
- construction equipment.

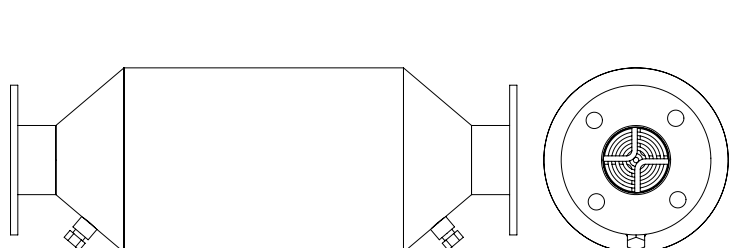
Any diesel engine will have radically reduced particles and emissions by fitting an ECI Predator Particulate Catalyst.



**Access Hatch Type**



**Fully Welded Type (no hatch)**



# Manage your machinery emissions and improve productivity

ECI cater to broad sectors including building construction, industrial, above and underground mining, on and off road transport and power generation providing a full service offering – tailored design, manufacturing, installation, service and maintenance.



## On-Site Analysis

Conduct on site exhaust inspections and testing using the latest **Kenelec Scientific** testing equipment. Your vehicles can be tested on site without any disruption with instant results.



## Measured Results

Graph your test data and provide the right product recommendations to achieve safe emission levels and increased productivity.



## Product Solutions

Tailored product solutions to reduce emissions on your entire diesel fleet.



## Total Preventative Management

Ongoing product monitoring.

## Exhaust Control Industries

Air and noise pollution control specialists

ECI is the leader in Co-generation and SCR technology in Australia.

Our air and noise pollution control products include Silencers, Diesel Particulate Filters, Diesel Particulate Catalyst, Catalytic Purifiers, Waste Heat Recovery Systems and Acoustic Enclosure Products.



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