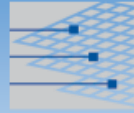


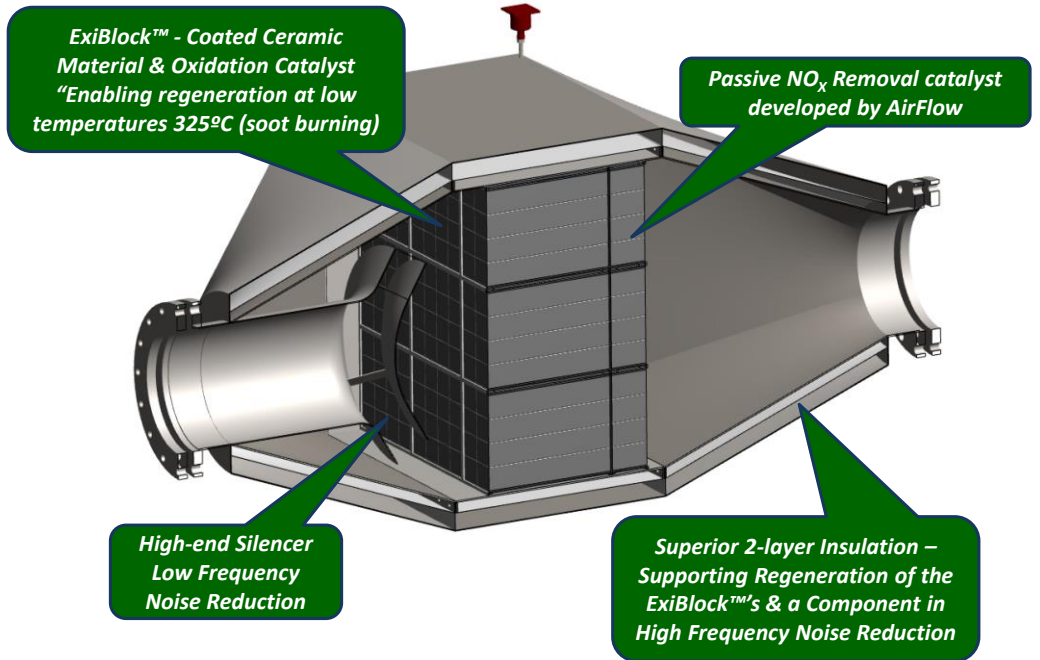
# EXHAUST PURIFICATION



AirFlow  
Catalyst Systems™

# EXILATOR

## THE EXILENCER™



### PASSIVE

### EXHAUST SYSTEM

### REMOVING PARTICULATE MATTERS

### CARBON MONOXIDE

### REDUCING LOW & HIGH FREQUENCY NOISE

### NITROGEN OXIDES - NO<sub>x</sub>

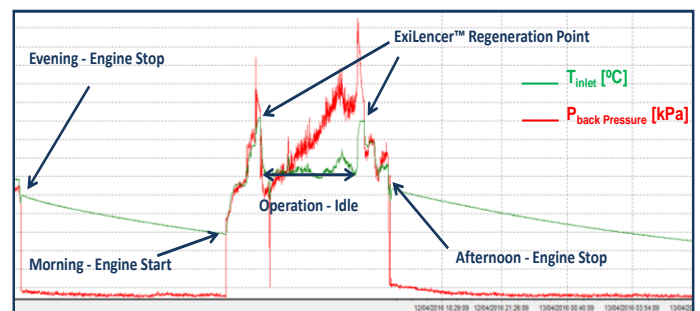
**ExiLencer™** is engineered to handle following aspects:

- The ceramics are produced by Exilator™ and coated by AirFlow, **ExiBlock™**, removes:
  - Exhaust gas Particulate Matters (reduction > 98%).
  - Carbon monoxide, CO (reduction >99%).
- The special designed diffusor ensures low back pressure and an even distribution of the flue gas.
- Noise reduction of up to 35 dBA is detected in the exhaust pipe.

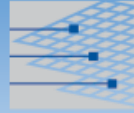
**ExiLencer™**'s patented AirFlow coating causes regeneration at a much lower flashpoint temperature, than other exhaust systems. The exhaust gas ignites Particulate Matters / soot already at 325 °C.

A secondary effect of the **ExiLencer™** is the positive **NO<sub>x</sub>** balance provided by AirFlow's catalyst.

The **ExiBox™** monitors continuously key exhaust parameters and if threshold are violated, the system notifies the crew, via hard-wired or remote alarms.



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**ExiLencer™** is suited for 4-stroke diesel engines, running on low Sulphur fuels (LS-MGO, <0.1%).

**ExiLencer™** is made from AISI 316 stainless steel, providing a durable casing withstanding both mechanical stress as well as the acidic environment that the flue gas creates.

The **ExiBlock™**'s are clothed in ceramic mats, serving the purpose of:

- Avoiding flue gas bypassing the **ExiBlock™**'s, to ensure the very high exhaust system efficiency.
- Reducing mechanical stress and always ensuring correct fixation of the **ExiBlock™**'s, which provides durability, even in rough seas, and giving the **Exilencer™** extra longevity.

The **ExiBlock™**'s are easy replaceable e.g. during the annual service.

The **Exilencer™** back pressure is always optimized to the actual engine. Simple design guidelines help defining the right size of the **ExiLencer™**.

The **Exilencer™** Design Chart, below, shows scalability.

As an example; the ideal size of **ExiLencer™** for one 1.2 MW propulsion engine, with a maximum allowable back pressure of 10 kPa, is **12 ExiBlock™'s**.

A lower back pressure (< 3 kPa) can be achieved, when applying more **ExiBlock™'s**.

A solution of 8 **ExiBlock™'s** can be selected, however, **Exilator™** can only recommend this if the back pressure of the original exhaust system is low, or the engine is operated with care.

Selecting 6 **ExiBlock™'s** provides no operational margin and cannot be recommended.

