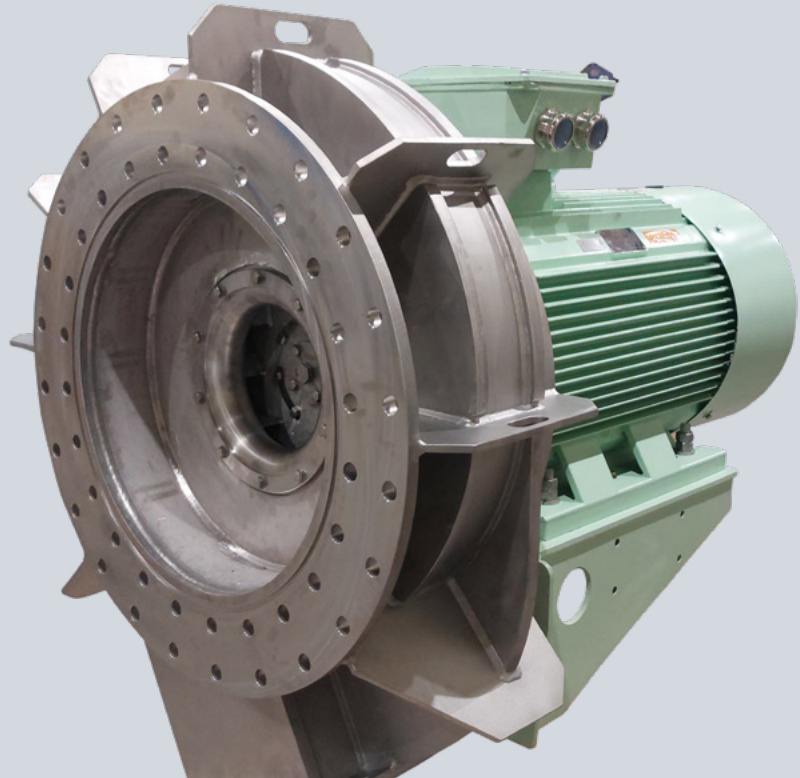


The blower package is provided as an easy to install unit for integration into marine engine EGR systems. **Our engineering expertise provides a flexible solution to all engine types with modifications to meet requirements.**



EGR blower benefits



Full range of tests to ensure **reliable continuous operation**



No gas leakage by using carbon ring seals



Compliance with **marine classification standards**



Available for ME-GA engines – **adaptable to other types**

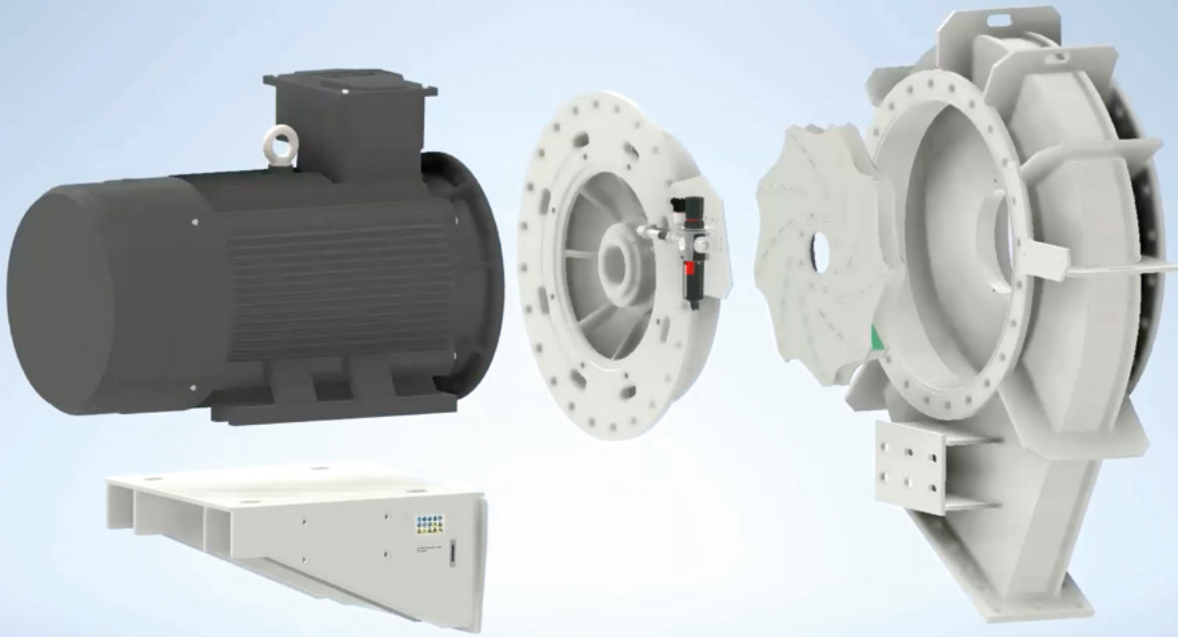
Howden's blower technology is an integral part of marine diesel engine compliance with IMO Tier III regulations.

Exhaust Gas Recirculation systems play a critical role in enabling continued marine operations in shipping areas subject to regulations controlling Nitrogen Oxides (NOx) levels.

The EGR blower is designed to recirculate exhaust gas generated by 2-stroke diesel engines supplied for marine vessels. The current model range supports 11MW, 12MW and 14MW ME-GA engines, but can be adapted and extended based on alternative engine requirements.

Advanced design techniques using finite element analysis coupled with specialist engineering expertise provide a blower range capable of high levels of efficiency and durability.

High quality manufacturing and full testing throughout (pressure, running and aerodynamic tests) ensures that each blower is ready to perform effectively once commissioned and operate reliably.



Design data	EGR11.1	EGR12.1	EGR14.1
Design speed		3580 rpm	
Design medium temperature		70°C	
Design medium pressure		5.5 bara	
Design pressure increase		1.075 – 1.120	
Design flow	1,96 m³/s	2,15 m³/s	2,59 m³/s
Motor power		166 kW @ 55°C	206 kW @ 55°C
Frequency converter		166 kW @ 55°C	206 kW @ 55°C

Built to handle tough exhaust gases without leakage

The blower design has been verified through finite element analysis of components including fatigue and load stress analysis of impellers and casings and modal and frequency response analysis of the impeller and fan system.

The impeller and casing are manufactured from stainless steel for durability and protection against corrosive gases.

Carbon rings prevent flue gas from leaking out of the casing with seal air injected between the carbon rings. Seal air pressure is measured by a pressure transmitter, while filtering and adjustment is carried out using a pressure regulator.

Motors are approved for marine environments with two outputs depending on blower model. Flexibility is provided by the ability to rotate the terminal box by 180° and different grease nipples can be provided on request.

Control over operation and increased efficiency is obtained from variable frequency drives supplied.

For more information contact our team today:

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