

EXHAUST GAS RECIRCULATION (EGR) BLOWERS

Advanced NOx reduction technology for
IMO Tier III compliant two-stroke marine
diesel engines

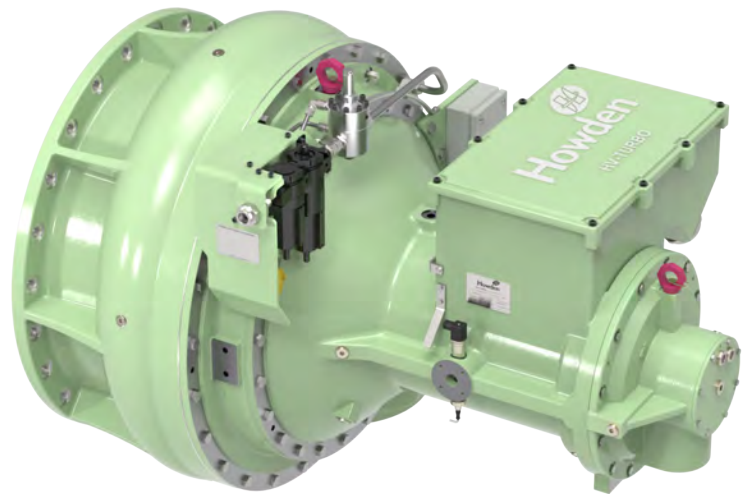


Turning IMO Tier III compliance into a competitive advantage



With hundreds of units operating on vessels around the world and with zero reported failures, HV-TURBO blowers are integral to Exhaust Gas Recirculation (EGR) systems for compliance with the latest IMO MARPOL Annex VI (Tier III) emission standards, including current and emerging NOx Emission Control Areas (NECAs).

The EGR blower is a single-stage turbo blower with oil lubricated bearings, directly driven by an asynchronous motor and variable frequency drive, providing reliable and efficient operation.



By the numbers



>700

in operation



100%

on-time delivery

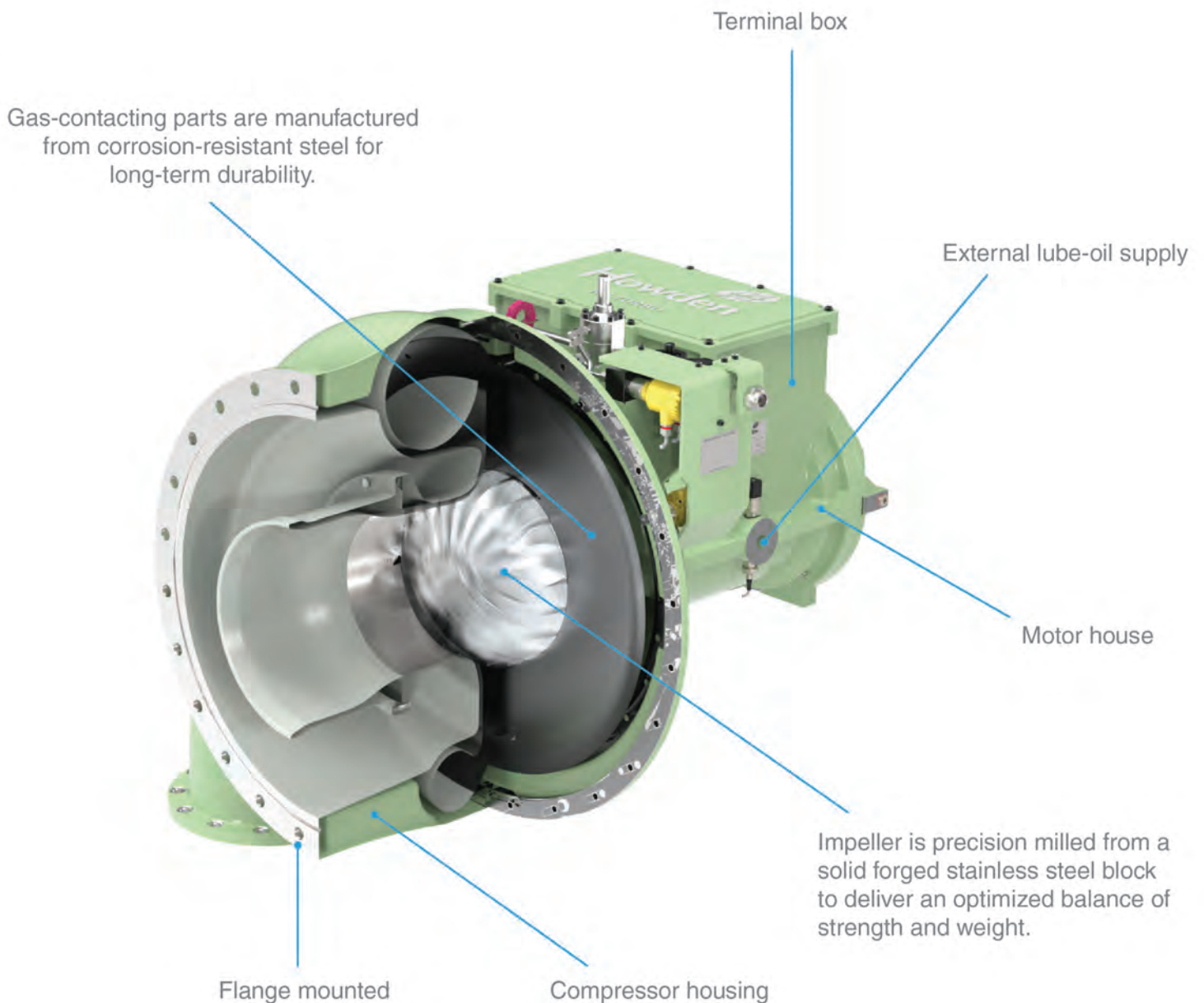


0%

reported failures

Proven reliability at sea, high efficiency engine performance, compact installation and simplified integration

- ✓ Contact-free carbon floating ring sealing system prevents exhaust gas leakage.
- ✓ Oil-lubricated journal bearings ensure dependable performance.
- ✓ Oil, sealing air, and cooling water supply pathways are fully integrated into the blower structure, eliminating the need for additional pipework.

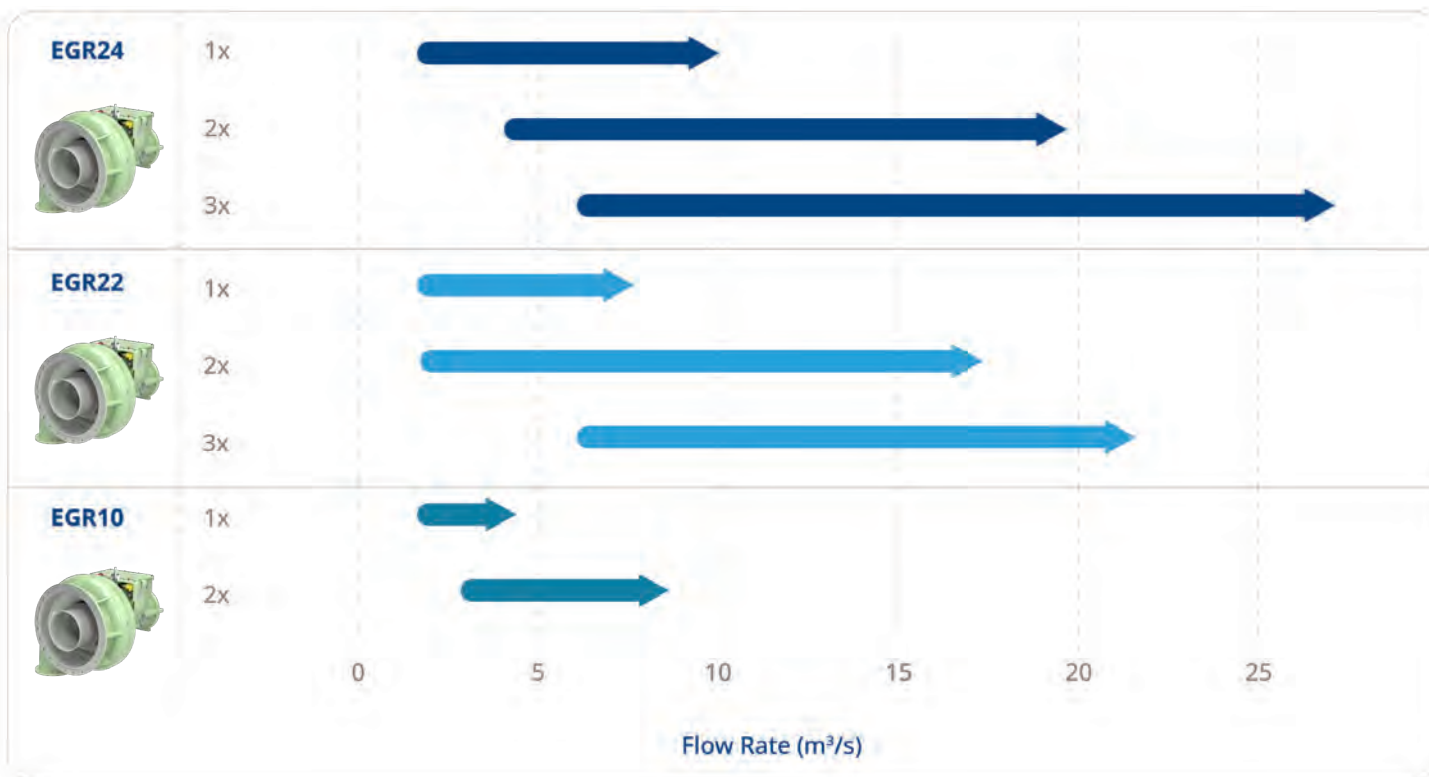


EGR10, EGR22, EGR24 blower series

ChartMarine offers three blower models designed to support varying engine sizes, design, flow demands, and EGR system configurations.

EGR blower maximum flow capacity

Density: 2.5 kg/m³ • Inlet temperature: 30°C • Pressure ratio: 1.04



The recently introduced EGR 24 is engineered for higher flow capacities across the range further reducing the number of units required per installation.



**Highest flow capacity
per blower size**



**Fewer units
required**



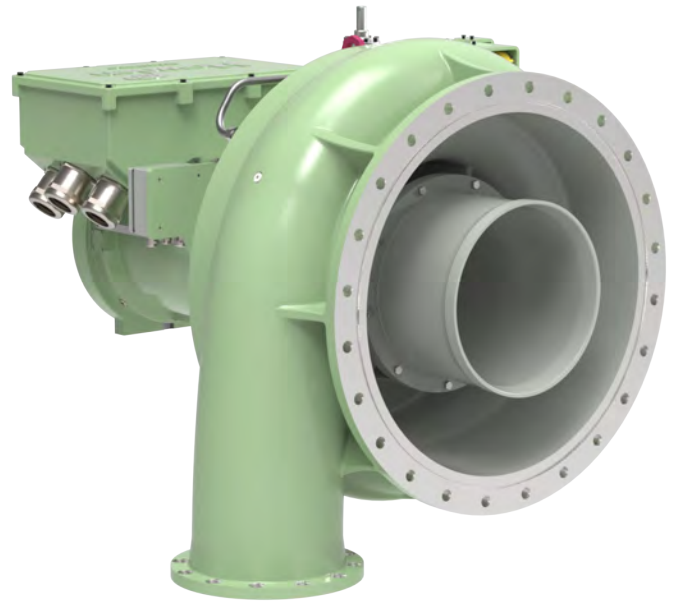
**Reduced footprint
and space**



**Lower capex
and opex**

Key features reduce overall project cost, complexity, schedule and risk

- **Fully certified** in accordance with the latest marine regulations, including IMO MARPOL Annex VI (Tier III).
- Proven **long-term reliability**.
- **Engineered for seamless integration** into EGR systems.
- **Advanced design** supports wide flow ranges minimizing the number of units required.
- **Consistency** across operating profiles in demanding conditions while reducing operational penalties.
- **Robust, marine-grade construction** designed for long-term durability and minimized maintenance.
- Comprehensive aftersales **service and support**.
- **Fully manufactured and factory tested** in Frankenthal, Germany.



Comprehensive aftersales service & support

Supporting every stage of the equipment lifecycle through a global service network designed to maximize performance, efficiency, reliability, uptime and longevity.

- Globally aligned, certified service and repair facilities.
- Rapid access to genuine spare parts and replacement components.
- Commissioning and start-up support.
- Preventative maintenance programmes and condition based service solutions.
- Swap-unit service concept.
- Expert technical assistance and troubleshooting.
- Qualified and highly experienced field service engineers.
- Upgrade and retrofit solutions.

Supporting marine decarbonization through our technologies

Carbon Capture

Capturing >90% of exhaust CO₂ and producing purified, liquid CO₂ for economical on-board storage and reuse. Simultaneous removal of NO_x, SO_x, and other pollutants.



Exhaust Gas Recirculation (EGR)

High-efficiency EGR blowers designed to reduce NO_x emissions by recirculating exhaust gases back into the engine. Proven performance with hundreds of units operating worldwide.



Power Generation & Waste Heat Recovery (WHR)

Steam turbines delivering measurable fuel savings and improved CII rating. High performance maintained from 10 to 100% load with fast start-up for immediate gains.



LNG & H

Comprise a natural gas blends to th

Hydrogen Propulsion

All elements for storage and delivery of hydrogen or hybrid natural gas/hydrogen engine.



Axial & Centrifugal Fans

Low energy consumption and proven reliability in vessels of all types. Applications include HVAC, engine room ventilation and emergency extraction.



NAVISTURBO by ChartMarine

In direct contrast to other air lubrication compressor solutions, NAVISTURBO by ChartMarine utilizes turbo compressors rather than screw compressors.

High-efficiency compressors for engine supported air lubrication, converting scavenge air to further reduce fuel consumption and lower CO₂ emissions.





Contact us to learn more

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