

# WITTIG

by Gardner Denver

## BOG Solutions for Marine Engine Systems

Wittig Rotary Vane Compressors

### ROW 40-460G



“BOG compressors delivering outstanding performance, reliability & economy.”



## Rotary Vane BOG Compressors by Wittig

Wittig are first choice for applications such as Marine Boil Off Gas (BOG) handling where reliability and efficiency are critical requirements. For many decades Wittig have designed and manufactured an impressive range of high performance, long-lasting and reliable vacuum pumps and compressors, for both gas and air applications.

Future environmental regulations will not allow heavy oil as a fuel for shipping. The alternatives are then marine diesel or the cheaper liquified natural gas (LNG), which is why many new buildings are already equipped with gas drives.

The LNG is stored in tanks at temperatures of approximately  $-165^{\circ}\text{C}$  which is close to vaporisation temperature. Even the smallest amount of external heat will cause natural evaporation, known as boil-off, which is then compressed by Wittig compressors and fed through to the engines.

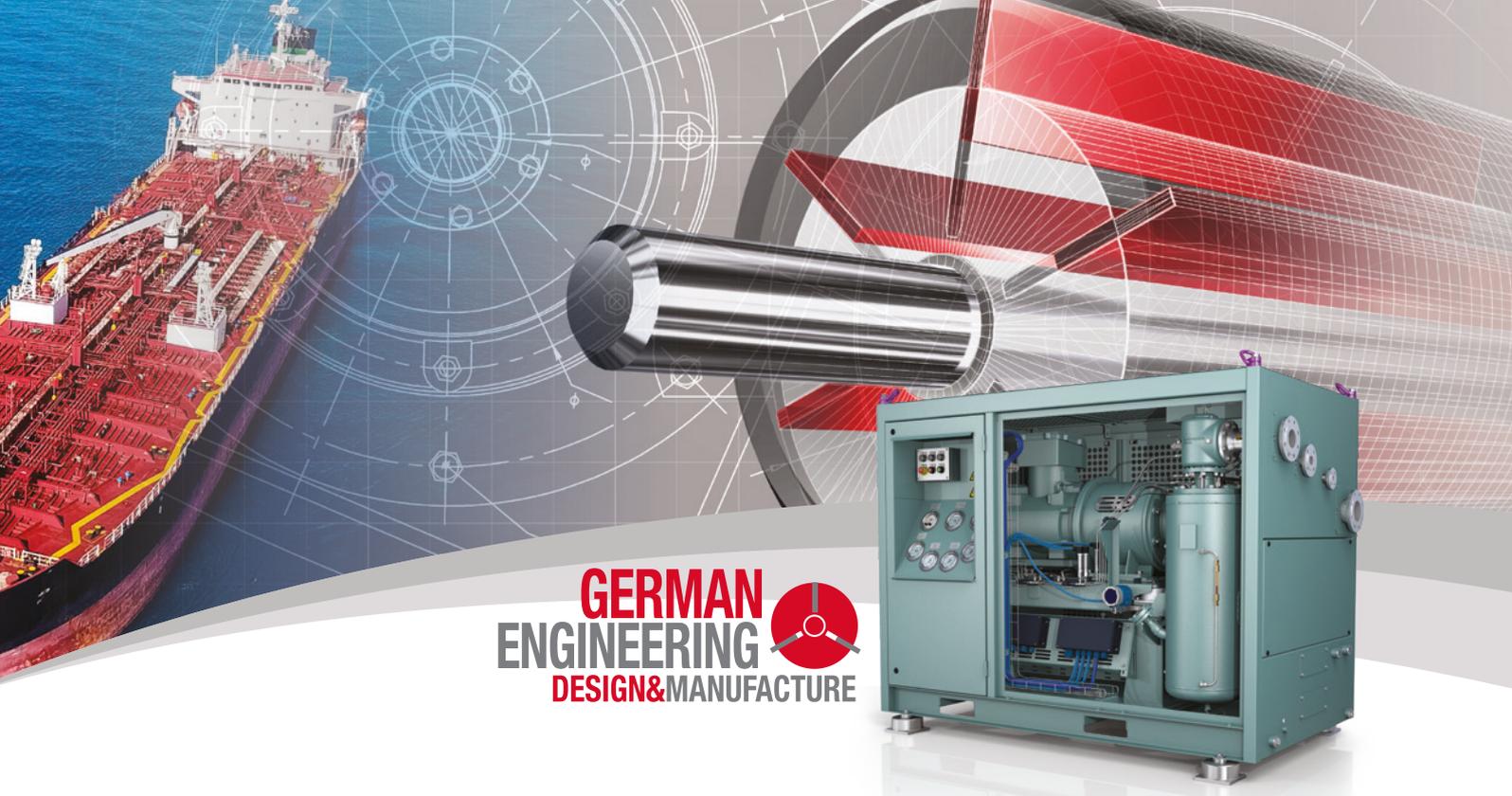
Rotary vane BOG compressors supply high quality, pulse-free compressed gas, reliably and efficiently and can last up to three times longer

than alternative technologies. They are designed to last and deliver years of flawless operation – with a minimum number of rotating parts and no axial loads leading to very low structural borne noise, low heat loss – in turn delivering maximum energy efficiency and low maintenance.

Flow rates and pressures do not degrade throughout the life of the compressor – something that is not possible with piston or screw compressors.

Available as standard off-the-shelf or complex and bespoke custom packages, these rotary vane compressors deliver high quality and reliability – able to operate 24/7 while providing low life cycle costs.

Wittig ROW Marine compressors for BOG applications are available in a variety of sizes with volume flow from 200 to 3,000  $\text{m}^3/\text{h}$  and with discharge pressures from 3 to 15 bar(a). They are the most compact compressors available, with the smallest occupying just  $2.9\text{m}^2$  of floor space and just  $5.39\text{m}^3$  volumetric space.



**GERMAN**  
**ENGINEERING**  
**DESIGN&MANUFACTURE**



### Technology

- Single stage compression from 3 - 15 bar(a)
- Volume flow from 200 - 3,000 m<sup>3</sup>/h
- Low rotational speed of 900 - 1,800rpm
- Residual oil content down to 0.003 mg/m<sup>3</sup>
- Frequency controllable between 30 - 60Hz
- Low noise and vibration
- Small footprint
- Low maintenance and unique long life expectancy

### Cost Efficiency

- High efficiency at high availability
- Low energy consumption
- Generating low heat of approx 60 - 80°C
- Heat recovery of up to 75% of the shaft power
- Exceptional safety standard
- Up to 100,000 operating hours without overhaul
- Long service life of bearings and rotors
- Bearings can be changed on site
- Easy to install

## Genuine parts and professional services **delivering total peace of mind**

Gardner Denver's vast international network of engineers, service professionals and distribution, ensures total peace of mind with quality genuine spare parts and lubricants designed for optimum performance and efficiency – despatched within hours of ordering – supplied and fitted by maintenance experts who work as part of your team.

Genuine parts and professional services that guarantee more uptime, better performance and deliver value for money that affects your bottom line.

- Replacement part deliveries within 24 hours for stocked parts
- Service kits
- Personalised maintenance and service contracts
- Complete and fully qualified overhauls of your compressed air system
- Service training of customers with competent advice in the construction, operation and maintenance of machinery

Rotary vane technology – designed, manufactured and supplied by Wittig.

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**Technical data**

VOLUME FLOW	POWER REQUIRED ON SHAFT	MOTOR RATING	PRESSURE
m <sup>3</sup> /h	kW	kW	bar (g)
200 - 3000	15 - 300	37 - 315	2 - 14

## Gardner Denver **Industrials** The **Ultimate** Technology Choice

Gardner Denver Industrials designs, manufactures, markets and services rotary screw, reciprocating and sliding vane compressors in addition to multistage and positive displacement, centrifugal and blowers.

The end market sectors served by Gardner Denver Industrials are primarily industrial manufacturing, transportation, energy, mining, construction, environmental, plus food and beverage. Gardner Denver Industrials delivers the broadest range of compressors and vacuum products, in a wide array of technologies, to end-user and OEM customers worldwide.

The global offering also includes innovative service and warranty programmes.

Industrials is part of Gardner Denver, Inc., a leading global manufacturer of highly engineered, critical flow-control products. Gardner Denver is headquartered in Milwaukee, Wisconsin, USA and has facilities in more than 30 countries.

[www.gardnerdenver.com/industrials](http://www.gardnerdenver.com/industrials)

Gardner Denver policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice.

Certified by:



**Gardner Denver Schopfheim GmbH**

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