Burckhardt Compression

High-pressure compressors for LNG BOG management

MAN ME-GI fuel-gas supply on merchant ships

LNG as a marine fuel alternative

IMO regulations are set to reduce the sulfur content in marine diesel to 0.5%, making LNG a more competitive alternative fuel for merchant ships. To maintain the structural integrity of onboard gas tanks, boil-off gas (BOG) must be effectively managed. The most efficient method of handling BOG is to utilize it as fuel.

Burckhardt Compression offers a variety of compressor solutions for BOG handling that have been specifically designed for marine applications. Our Marine high-pressure compressors can compress the BOG for injection into high-pressure ME-GI engines.

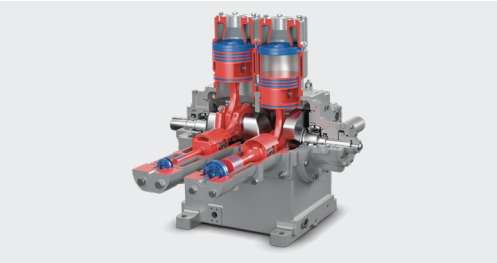
Customer benefits

- Low investment cost for Marine high-pressure compressor system required (attractive CAPEX)
- Gas-tight crankcase for greater safety and zero gas loss
- Possibility of installing redundant BOG-handling compressors
- Low power consumption leads to minimized operational costs (OPEX)
- Small footprint and minimum weight
- Low system complexity for easy integration
- Ship's crew can perform onboard maintenance
- Simple parallel operation with pump vaporizer
- Full range of after-sales services available

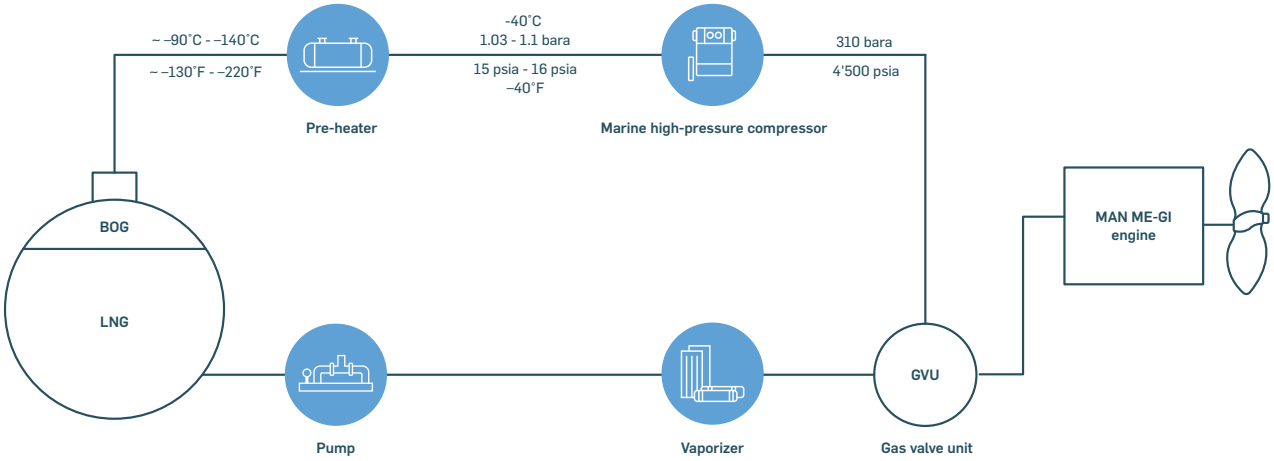
Marine high-pressure compressor — Minimized noise and vibration

Design features

- Robust marine design
- Directly driven by an electric motor
- Installed on anti-vibration mounts
- Water-cooled cylinders and gas coolers
- Integrated crankshaft-driven lube oil system
- Compliant with IMO, IGF and IGC codes
- Designed according to marine standards



Process layout



Technical data

Type	Max. speed rpm	Rated power kW / hp	Mass flow* kg/h / lbs/h	Width mm / in	Height mm / in	Length mm / in	Weight kg / lbs
MHP-A-310	1'180	168 / 225	450 / 990	3'200 / 126	3'650 / 144	5'200 / 205	14'000 / 30'870
MHP-C-310	1'180	350 / 470	900 / 1'985	3'250 / 128	3'150 / 124	6'700 / 264	24'700 / 54'465

*Gas composition: CH_4/N_2-85/15%. Suction pressure: 1.03 - 1.1 bara (14.9 - 16 psia). Gas suction temperature (pre-heated): –40 °C (–40 °F)

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