

Welcome to GEA

World-leading process technology

German-Indonesia Business Forum

Shipbuilding and Maritime Technology Solutions

27/02/18





Order intake (EUR)

4,674 million



Employees (FTEs)

16,937



Operating EBITDA (EUR)

566 million



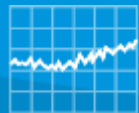
Operating EBITDA margin

12.6%



Revenue (EUR)

4,491 million



Earnings per share (EUR)

1.48

GEA – “engineering for a better world”

GEA is one of the largest suppliers of process technology for the food industry and a wide range of other industries.

The international technology group focuses on process technology and components for sophisticated production processes in various end-user markets.

The company is listed on the German MDAX stock index and included in the STOXX® Europe 600 Index. In addition, the company is listed in selected MSCI Global Sustainability Indices.

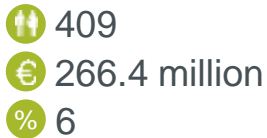
GEA – a powerful partner throughout the world

Customer-centric sales and service activities are unified under the umbrella of a single country organization.

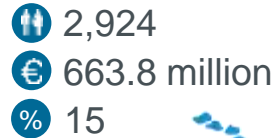
North America



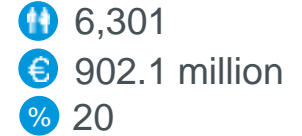
Latin America



North and Central Europe



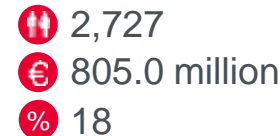
DACH & Eastern Europe



Asia Pacific



Western Europe, Middle East & Africa



- 👤 Employees in 2016 (FTEs)
- € Revenue in 2016
- % Regional revenue split in 2016 (only continued operations)

Our ambition – be your no. 1 choice

We strive to be the world's leading global technology group in supplying smart solutions for sophisticated process industries. Our goal is to be the customer's preferred partner in the industries we serve.

Our applications – in touch with GEA every day

Dairy Farming and Processing

Approx. one quarter
of processed milk
comes from GEA
production systems



Every fourth liter of
human blood is
handled by GEA
equipment

Pharma

Food

Every third chicken
nugget is produced
by GEA technology



More than one third
of all polymer
producers are using
GEA Drying
technology

Chemical

Around every third
process line for
instant coffee was
installed by GEA



Each industry we serve
utilizes GEA's industrial
refrigeration technologies

Utilities

Beverages

Approx. every second
liter of beer is brewed
with the aid of systems
and process solutions
from GEA



Every second
container ship in the
world sails with GEA
marine equipment on
board

Marine

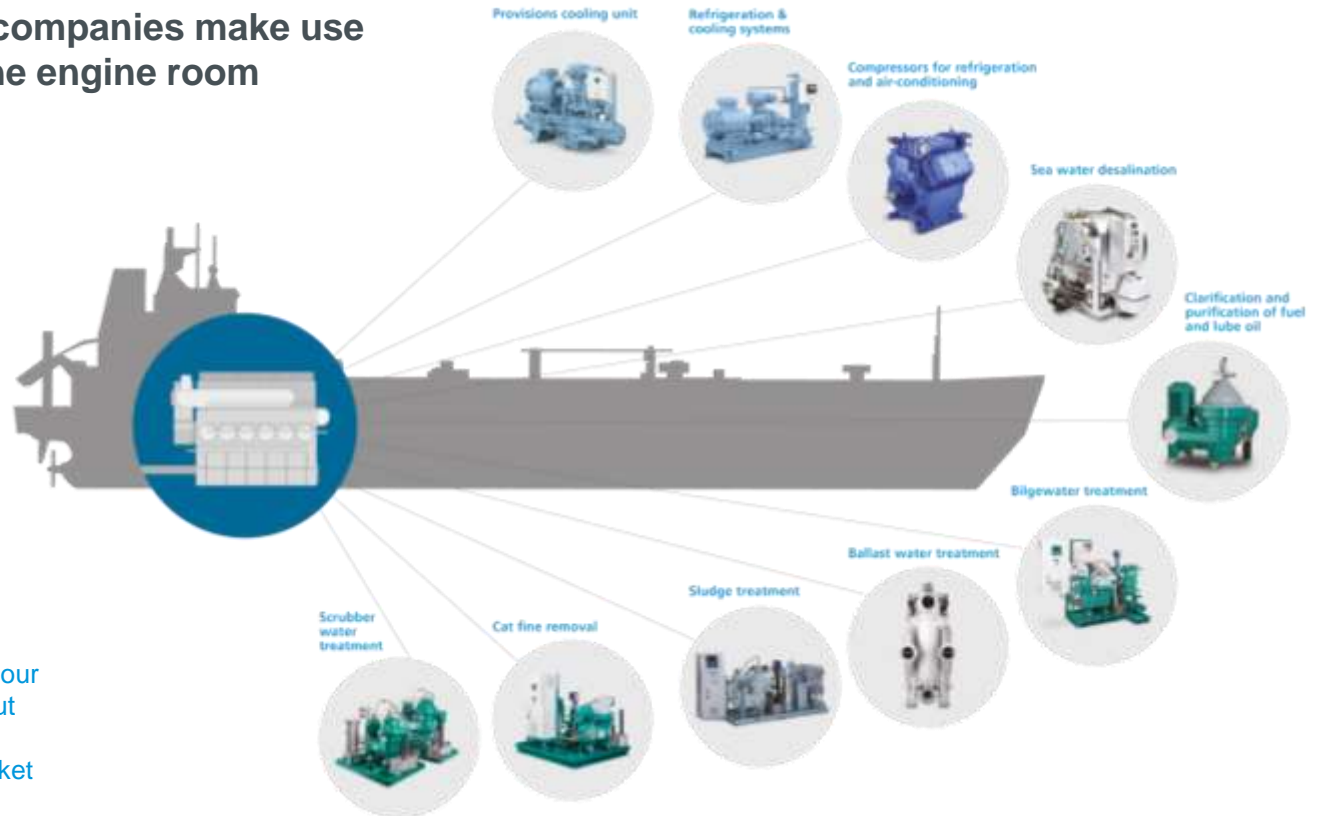
GEA Customers in Indonesia





Application Range Marine

Successful shipping companies make use of GEA expertise in the engine room



GEA SERVICE FOR YOUR CONTINUED SUCCESS
We build, maintain and improve our customers' equipment throughout the full life cycle so they could focus on their business and market challenges.

Keeping cool on the high seas

GEA HG44e
semi-hermetic compressor



GEA F16
open type compressor



Approved for Marine Applications

With their uncompromising quality and resistant construction GEA HG and F compressor are predestined for maritime applications at sea

Energy efficient freshness on board

Freezers



Ice machines



Industrial screw compressors



Commercial piston compressors



Ice towers



Products at a glance

- Tailor-made solutions
- Engineering & contracting
- Valves and fittings: Particular applications with regard to maximum permissible pressures
- Freezers: For fish that has been unprocessed, filleted, or portioned and otherwise prepared for the convenience of consumers
- Ice machines: More than 40 models delivering various ice qualities, including slurry ice and flake ice
- Ice towers: Extensive portfolio of solutions for fishing harbors and supermarkets
- Piston and screw compressors: Covering all normally encountered requirements placed on the supply of refrigeration
- Engineering & contracting: Covering all normally encountered requirements placed on the supply of refrigeration
- Control systems: For individual units or complete systems to assure maximum benefits

Sea water desalination by evaporator

GEA SeaWaterDistiller



The principle of sea water desalination by evaporation

Desalination is based on the principle of evaporation: sea water that has been filtered through a coarse mesh is evaporated in a heat exchanger plate stack that is made of titanium to precipitate out salt and impurities. A further plate stack then condenses the steam into drinking water. A salt measuring cell checks for residual salt content, which should be below four parts per million (ppm). If a value below four ppm can be reliably maintained, then the desalinated water can be passed to a storage tank before further treatment by UV sterilization.

Concepts and high performance equipment
for the engine room

GEA manual and self-cleaning separators



GEA ViscoBoosterUnit



Product range overview

- Fuel and lube oil treatment
- Fuel conditioning
- Sludge treatment
- Effective cat fines removal

GEA SludgeMaster



GEA CatFineMaster



Economically and ecologically sound solutions

Product range overview

- Ballast water treatment
- Scubber water treatment
- Bilgewater treatment
- Energy recovery



*BallastMaster marineX –
powered by Trojan Marinex*



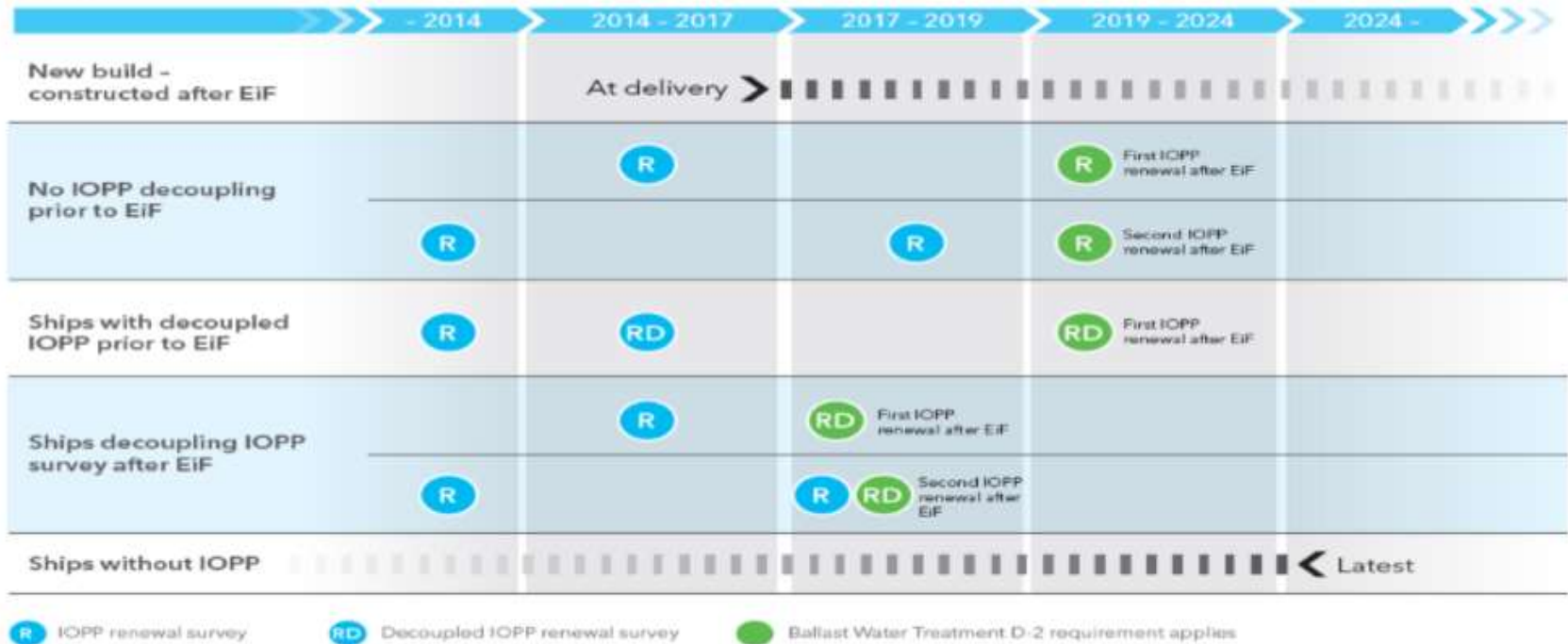
GEA ScrubberMaster



GEA BilgeMaster

Every vessel has got a final date of compliance

CASES



EIF - Entry into Force, 8 September 2017

The periods in the timeline start on 8 September and end on 7 September



- **Committed to USCG Type Approval**– completed tests at USCG-approved facility by independent lab, expecting decision on MPN 2017.
- **Compact Footprint** – UV and filtration integrated into one unit. Up to 50% smaller than other available systems.
- **Low Installed Power Draw** – up to 50% less compared to other systems.
- **Wide Operational Capability** – not limited by salinity or temperature. Tested to one of the lowest UVT values in the industry, under full flow conditions.
- **Strategic Partnership** – unites industry leading water treatment experts with trusted marine brand.



engineering for
a better world

Thank You