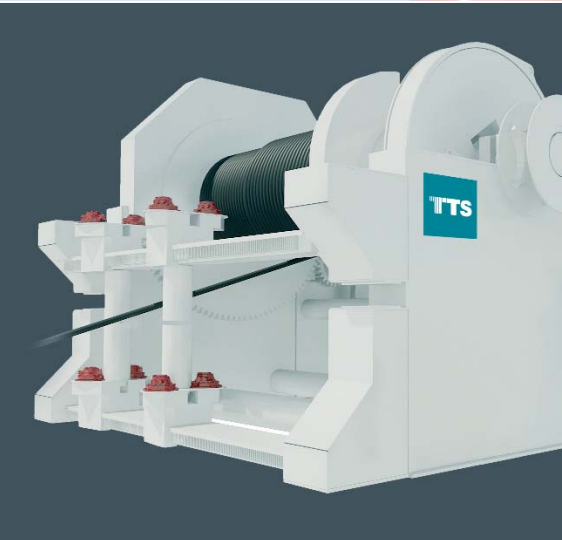


Marine Cranes



TTS MARINE CRANES DIVISION



www.tts-marine.com

TTS Marine Cranes division

The TTS Marine Cranes division will deliver all of its marine and offshore products with a level of quality and safety that meets all customer expectations. Giving best advice and offering best practice in providing solutions on advanced offshore handling challenges is our goal. Combining this with a competitive aftersales capability, TTS will partner its clients through the product lifecycle as well through repeated deliveries. This products-and-services approach goes hand in hand with a profitable and environmentally friendly operation.

The TTS Marine Cranes division is a global entity that designs and supplies cranes, lifting, and handling solutions for the marine and offshore markets.

The company's resources are focused on sales, design, assembly, testing, commissioning, training, aftersales and service.

TTS Marine Cranes AS is the parent company of the Marine Cranes division, with headquarters in Bergen, Norway. The division consists of the following companies and centres of excellence.



A key factor in TTS' success is the meeting of customer requirements and expectations so that the products and solutions delivered increase customers' productivity and profitability



Company

TTS Marine Cranes AS
Bergen and Kristiansand, Norway

TTS Offshore Handling Equipment AS
Ålesund and Os, Norway

TTS-LMG Marine Cranes AS
Lübeck, Germany

TTS Marine Shanghai Co Ltd
Shanghai, China

TTS Bohai Machinery Co Ltd
Dalian, China

Centre of excellence and operation

Engineering of offshore and marine cranes (cylinder-luffed).
Assembly and commissioning of cranes.

Engineering of control system(s).
Supply of system delivery of custom offshore handling equipment.

Engineering of wire-luffed cargo and heavy load marine cranes.

Engineering of marine cranes, assembly and commissioning of cranes for the Far East market (excluding China).

Engineering of marine cranes, assembly and commissioning of cranes for the Chinese market.

Standard cranes for hose handling, cargo and service

The modular construction of our cranes enables us to supply a wide range of reliable, functional products to the world fleet at very competitive prices.

TTS's modular construction methods allow the company to build a wide range of cranes at extremely competitive prices. TTS offers cranes from 1-250 tonnes as standard, with products suitable for use in offshore environments as well as for hose handling in oil terminals, container handling and bulk materials.

Modular construction means TTS can build cranes for specific applications from standard components, ensuring minimal downtime and the ready availability of spare parts when needed. But this standardisation doesn't mean any sacrifice of flexibility – in fact, modular construction enables customisation without the need for expensive upfront engineering. This reduces the



risks for customers, and speeds the job of creating a solution to the customer's satisfaction. Reliable, durable and cost-effective, the TTS range of standard cranes will solve the vast majority of lifting challenges.



The depth and breadth of expertise is the result of working side by side with customers to develop realistic, affordable products and systems designed to protect their investment

Heavy lift, reefer and special cranes

TTS cranes are built according to well-proven, standard designs that can be customised as necessary to meet the special needs of today and of the future.



TTS is able to participate in developing customers' business by creating new solutions and tailor made designs, thus meeting the evolving needs of the industry. The company's experience in this way of working stems

from its sound base in having developed standardised crane products. This close relationship with customers facilitates the quality of research and development that benefits both parties.



Our philosophy of providing standard, yet flexible designs has made TTS one of the leading suppliers of a full range of deck cranes that meet even the most challenging functional requirements



Offshore cranes

From the inception of the offshore industry in the North Sea, TTS has been an active partner in developing cranes and equipment that can withstand the extremes of such a harsh environment.

TTS has been involved in the evolution of the North Sea's offshore industry from its beginning, maintaining its role as an active partner in developing offshore cranes and equipment that work in such a harsh environment.

From the many years of experience gained, TTS continues to develop offshore cranes to meet the ever increasing demands made by both customers and international legislation. TTS today supplies offshore cranes that meet the most demanding operational requirements.



The offshore industry continues to broaden its challenge to create new and more cost effective working methods without sacrificing product safety, reliability and quality. TTS develops technical solutions, standardised or customised, that surpass the demands of quality and durability required by the industry

Offshore handling

The key to TTS' presence in the offshore market is its strong engineering base in cybernetics, drive systems and mechanical design. The use of dynamic and visual real-time

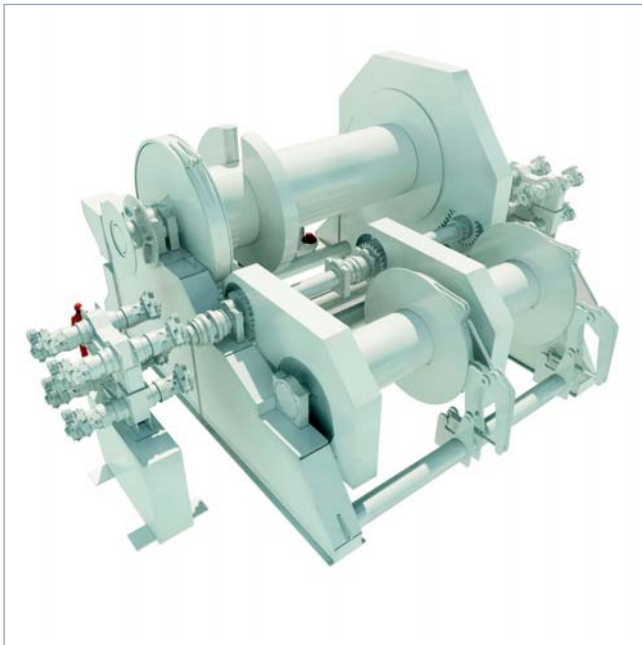
simulation tools enables the development of optimal handling solutions in a swift and cost effective manner. Safety, functionality and robustness are prime drivers in

the design of automated handling products to meet customers' very specific operational requirements.

As wave-induced movement is a restrictive factor while conducting many tasks offshore, TTS had developed a variety of motion compensated products. TTS heave compensated winch or crane systems, with capacities up to 400 tonnes, ensure safe and efficient operation in rough waters.

ensure safety for personnel.

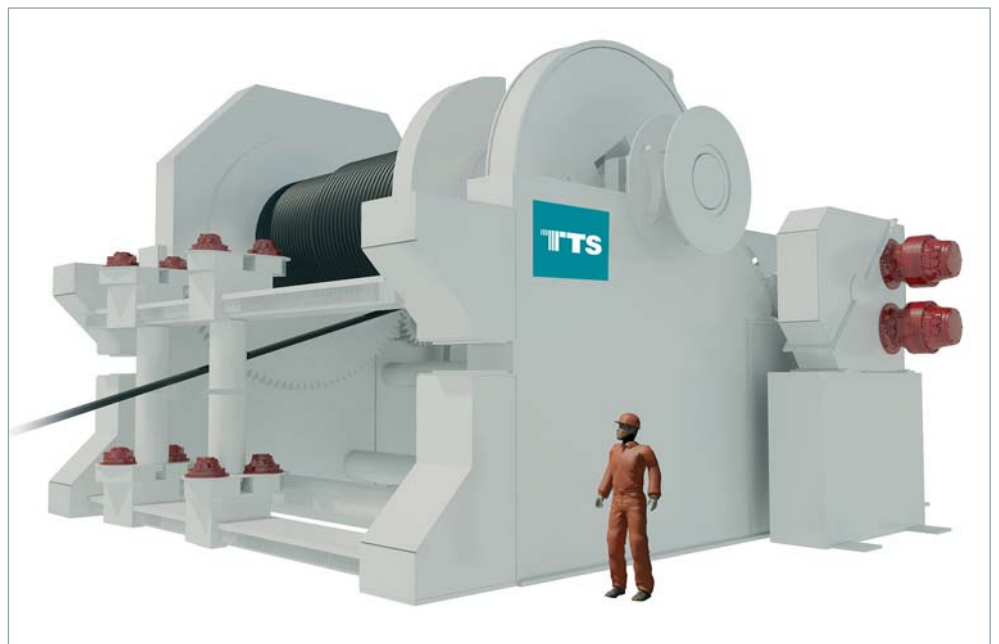
TTS can also deliver Anchor Handling/Towing winches to almost any size up to 500 tonnes. Complete winch packages, including secondary and other winches, can be supplied to almost any AHTS vessel. These winches are delivered together with advanced control systems developed by TTS.

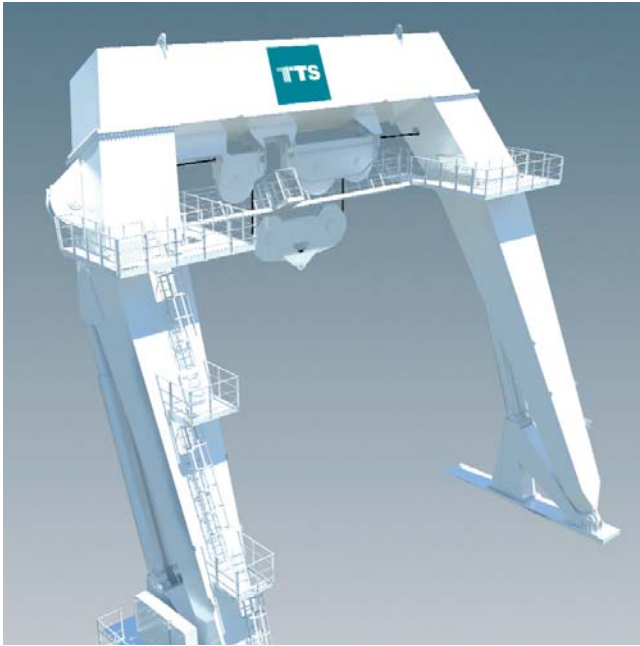


Active heave compensated work decks, gangways for offshore transfer of personnel, and stabilising systems for helicopter decks, are all applications that widen the 'weather window' within which operational procedures can be guaranteed, and also



TTS also offers a range of Anchor Handling/ Towing winches with active heave compensation

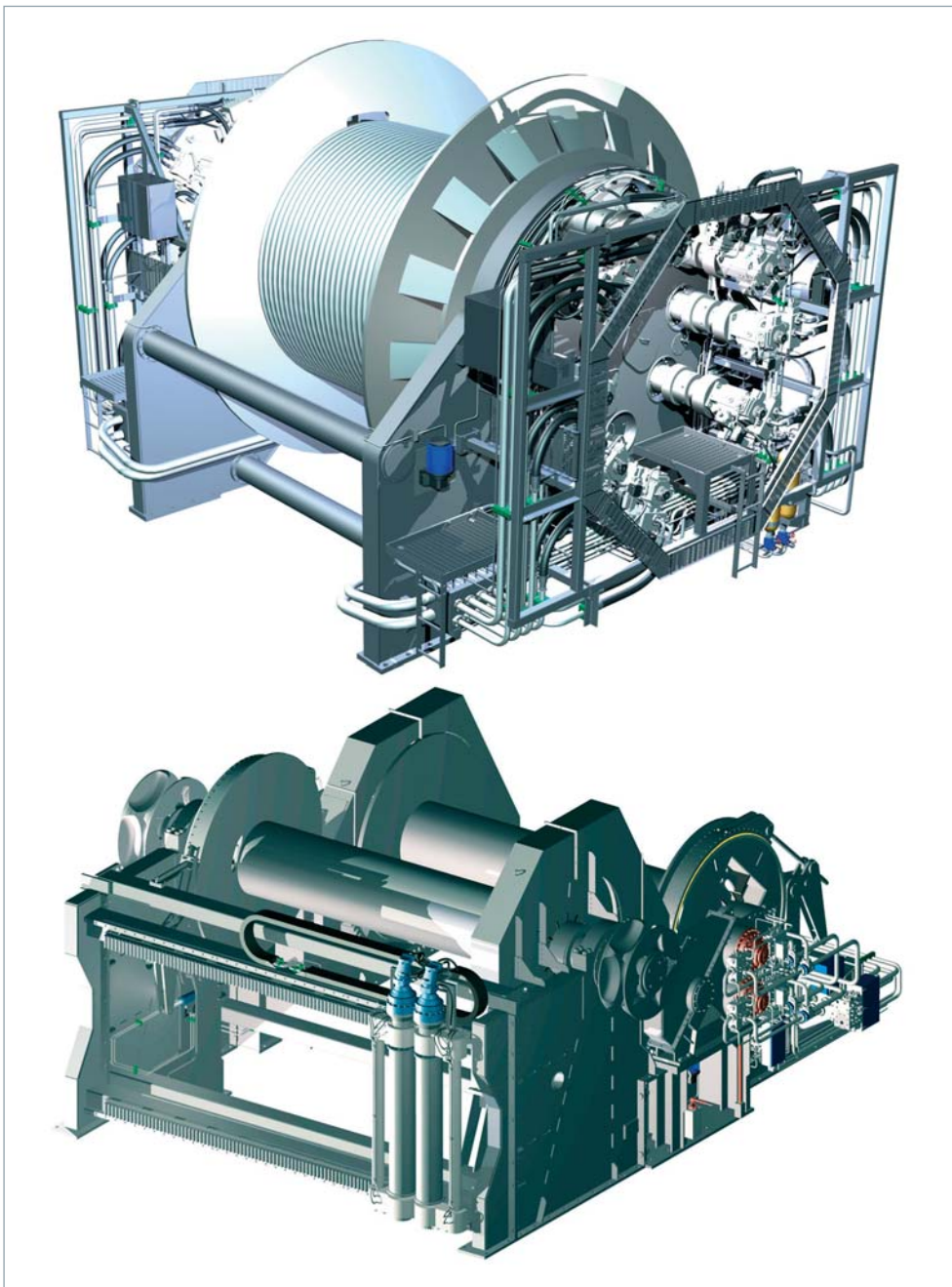




TTS offers a complete range of A-frames with lifting capacities of up to 350 tonnes and with a working radius tailor made to suit any vessel design. The A-frames are designed for offshore applications on all types of

vessels operating under these tough conditions.

They can be delivered for operation either with Anchor Handling/Towing winches or active heave compensated winches.



TTS offers a complete range of handling solutions for offshore activities including special systems for subsea operations, ROV handling and subsea deployment in up to 3000 meters of water depth

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Bergen-headquartered TTS Marine ASA is a global enterprise that designs, develops and supplies handling equipment for ships, ports, and offshore oil and gas installations.

The group targets four main business areas:

- MARINE
- OIL AND GAS
- PORTS, SHIPYARDS AND INDUSTRY
- SERVICES

The design and servicing of a wide range of equipment is focused through these areas to deliver: equipment for RoRo and cruise vessels; deck and mooring equipment; harbour terminal equipment; marine and offshore cranes; shipyard material handling; hatch covers; ship conversion; drilling equipment; offshore equipment; and side-loading systems. The close, flexible working relationships within the group enable the deployment of complete project teams across a range of fields.

TTS Marine ASA has been listed on the Oslo Stock Exchange since 1995. About 1500 people are employed throughout the group.

NORWAY

TTS Marine Cranes AS
Folke Bernadottesvei 38
P.O. Box 3566
NO-5845 Bergen
Tel: +47 55 34 84 00
Fax: +47 55 34 84 01
info@tts-mc.no

TTS Offshore Handling Equipment AS

Hundsværgata 8
NO-6008 Ålesund
Tel: +47 70 11 51 51
Fax: +47 70 13 00 73
info@tts-ohe.no

GERMANY

TTS-LMG Marine Cranes GmbH
Einsiedelstrasse 6
DE-23554 Lübeck
Tel: +49 451 4501 730
Fax: +49 451 4501 392
info@tts-lmg.de

CHINA

TTS Marine Shanghai Co Ltd
No. 433 Gao Dong No.2 Road
GaoDong Industrial Park, PuDong
CN-Shanghai 200137
Tel: +86 21 5848 5300
Fax: +86 21 5848 5311
sales@tts-marine.cn

TTS Bohai Machinery Co Ltd

Sujia, Dalian Wan Street
CN-Dalian
Tel: +86 411 8711 2670
Fax: +86 411 8711 2702
info@tts-bohai.com

CORPORATE OFFICE

TTS Marine ASA
Folke Bernadottesvei 38
P.O. Box 3577
NO-5845 Bergen
Norway
Tel: +47 55 94 74 00
Fax: +47 55 94 74 01
info@tts-marine.no

