

Anchor Handling and Towing Vessels

State of the art solutions for Anchor
handling - and towing vessels



MACGREGOR

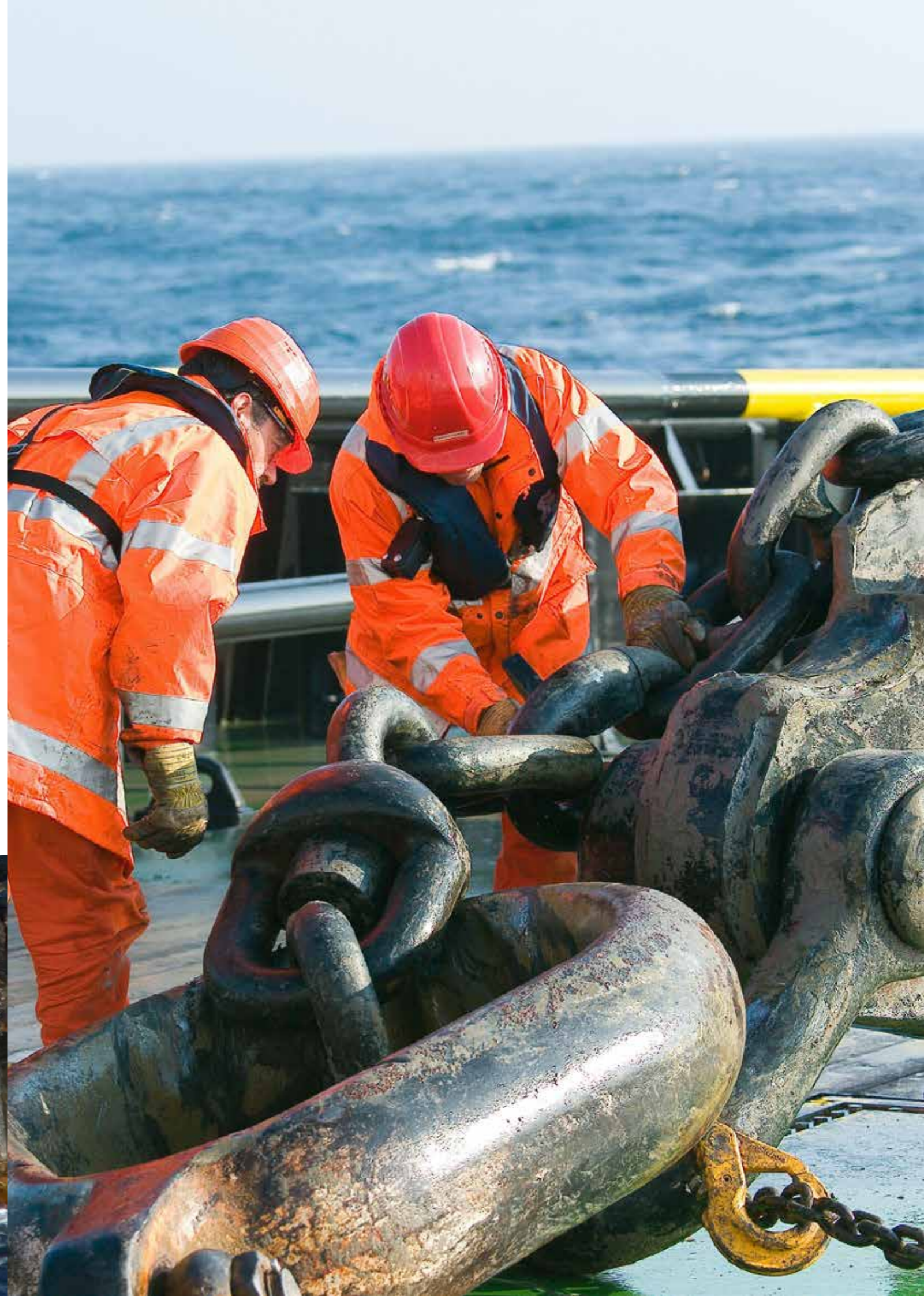
Passion for performance – united by the sea

MacGregor is a family of innovators. By engineering solutions that make the sea more accessible, safe and reliable, we support you whose livelihood depends on the changing conditions of the sea. To enable that we have a variety of strong product brands and committed experts with a passion for solving challenges – and the power of the sea is sure to provide those.

Our founders braved new frontiers in different times and places. Those origins merge at today's MacGregor, inspiring us to continue the stories, and create new ones. The spirit of our founders lives on in the pride we have for what we do, and our determination to find new solutions for the people we work with. Together with you we will write the next chapters.

We are a global team of professionals, who create value for you; the owners, operators, and ship builders in the offshore and marine industries. Understanding your business and way of life is key to our work. It is the foundation to addressing your needs with tailored solutions for load handling, cargo handling, mooring or essential auxiliary equipment. Your productivity, sustainability, and equipment lifetime benefit from our combination of expertise and technology. As innovators, we work together with you to set benchmarks in innovative solutions and value creation.

Our deep respect for and experience of the sea lays the foundation for adapting to its challenging conditions. Wherever we work around the world, we work together with a passion for performance and a love of challenges – united by the sea.



Improving your fleet's efficiency

We provide safe, reliable and innovative solutions that will help you accomplish your mission in the toughest of environments. Our products stem from a long history within the marine industry and a vision to provide our customers with products to improve your fleets efficiency and safety. With products suited for all aspects of the offshore industry, MacGregor offers a variety of deck machinery for the offshore industry inclusive of electrical as well as high and low pressure hydraulic winches, safe deck handling equipment and a variety of services to avoid downtime and ensure a long product lifecycle.



Offshore Winches

We understand the offshore industry's ever growing demand for operational flexibility and increased equipment reliability. MacGregor offers solutions designed to reduce operational cost and expand the operational envelope on all fronts. That means longer hours, more days, in more demanding conditions, while maintaining safety, reliability and efficiency with top precision.

Main winches

Electric anchor handling- and towing winches are designed with the latest version of variable frequency electric drives and advanced technology for safe, reliable and cost efficient anchor handling- and towing jobs. They offer a wide range of smooth speed controls including high-speed operations. With optimized control software and minimized inertia of the drive units, the winches provide excellent constant tension capabilities for anchor handling and towing operations. Hydraulically operated, water cooled multi disc-brakes allow dynamic lowering at high speeds and high loads. Length and tension monitoring, electronic maintenance plans and remote diagnostics are also available as additional options.

Secondary winches

Electric secondary or storage winches offer a huge storage capacity for large diameter steel wire or synthetic ropes that have considerably lower specific weight characteristics than steel wire. The winch drives have adapted advanced variable frequency drive technology, which offers smooth control of the tension and speed of the winches. A freshwater-cooled and hydraulically-driven multi-disc brake can be fitted to offer a significantly increased speed for dynamic braking.

All winches are also available with low pressure hydraulic drives.

Emergency release and peak load clutch

Emergency release by the use of our proved and praised innerfriction clutch offer a clear and improved benefit in critical operational situations. Furthermore the system offers complete control over the maximum torque in drive train to reduce stiffness and peak loads. All electrically driven main anchor handling and towing winches as well as secondary winches are equipped with this system.

Chain handling winches

Electric chain handling winches have variable frequency drives and allow for the safe use of various chain sizes by limiting the load on the chain to a preset value. They can be supplied as portable units with taylormade foundation for installation in chain locker hatches. Chain guide rollers and adjustable guide rollers for various chain sizes are also available.

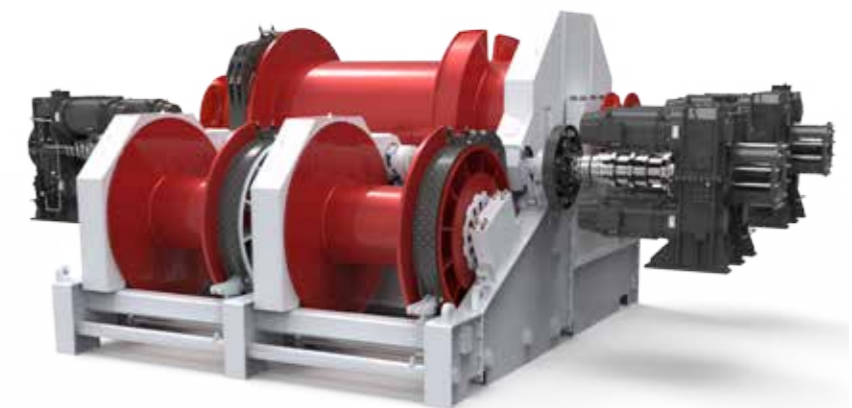
Chain wheel manipulator

Chain wheel manipulators are remotely-controlled systems, specifically designed to perform continuous successive cycles of chain wheel installation/replacement when necessary, onto an anchor handling/towing winch while the vessel is at sea even in adverse weather conditions. CWMs substantially reduce the necessity for heavy manual labour, ensuring the cost efficiency of operations and the safety of personnel and equipment. The system is designed in compliance with DNV's Rules for Certification of Lifting Appliances, 2008.



We also offer

- Sternrollers
- Anchor and mooring winches
- Capstans
- Tugger winches
- Rope reels



Above: Electrically driven main winch
To the right: Electrically driven secondary winch



Safe Deck Handling

Safety is a pivotal aspect of any work and is especially important in challenging and ever-changing conditions. The Triplex Safe Deck Handling products not only allow you to keep your workers safe, but ensure the maximum safety of your cargo and crew.



Shark Jaws and Towing pins

Triplex Shark jaws/towing pins are designed to meet the most stringent offshore standards, including those set by the Norwegian Maritime Directorate. The designs have Det Norske Veritas and American Bureau of Shipping Type approval. Shark jaws are used to secure chains or wires during anchor handling operations. A wide range of insert plates, made from abrasion-resistant and highly durable materials, are provided and are easily interchangeable for handling various chain sizes. A wire lifter is provided between the jaws to secure the wire socket in the top position. The angular-type towing pins have a simple design and strong construction, easily trapping the chain or wire when the pins meet at the top. Rollers are provided along the pin body to reduce friction when handling the chain or wire. Towing pins can also be provided in a vertical type.



Multi Deck Handlers

The Triplex branded Multi Deck Handler is the ultimate lifting equipment for all large anchor handling vessels. The large lifting and pulling capacity allows for the safe handling of large anchors, buoys and chains on deck of the vessel by "deck-hands". The MDH has revolutionized the safe handling of anchors at sea by controlling the spin-out of wires by a dedicated wire-clamp, remote controlled buoy catching as well as catching the pennant wire by remote control all from a safe distance to the handler.

Cargo Rail Cranes

MacGregor shipboard cranes of luffing, knuckle-jib and telescoping type are designed for safe and accurate deck lifts onboard ships and offshore installations, and cargo handling within harbors. The cranes may be delivered with safe working load of up to 20 tons and various slew bearing dimensions and height of pedestal to accommodate operational requirements and industry regulations. MacGregor shipboard cranes may be delivered in Cargo-rail version, mounted onto our cargo rail vehicle trolley system, the cranes can travel along the cargo rail covering the entire length of the aft deck. Triplex Cargo Rail Cranes offer reliable and effective methods of lifting and moving cargo for offshore vessels.



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Your partner in all situations

Our customer-driven engineering and service solutions support customers in their onboard, port and offshore operations worldwide. Today, half of the world's oceangoing ships are fitted with MacGregor equipment. Turn to us when you want a reliable partner to keep that equipment up and running throughout your ship's lifetime.

Economy and ecology go hand-in-hand

MacGregor continues to develop environmentally-friendly cranes, hatch covers, RoRo cargo handling solutions on board and in port, winches and other equipment with electric drives, as well as dust-free conveying systems with totally enclosed loading and unloading equipment for dry bulk materials. We focus intensively on our environmental responsibilities, adapting our bulk handling systems for operation even in densely populated areas.

MacGregor offers you lifecycle support for ships, ports and terminals, offshore and rigs. We complement our products with original spare parts and support services around the clock.

Global Presence, 24/7

Our service portfolio covers all equipment on board, offshore and in port. Armed with our world class expertise in cargo and load handling, we can provide service to our customers all over the world. Our worldwide service network means that we are able to respond rapidly to our customer's needs.

Product experts

MacGregor's product experts are on standby worldwide to provide a rapid response to your needs. We operate in approximately 50 countries and we are constantly strengthening our local presence to meet changing market needs. MacGregor's service network consists of more than 60 service centres in major ports around the globe, staffed by specialists. We supply original MacGregor spare parts and repair services on a planned schedule, on demand or on an emergency basis.



We are only a phone call away, often just around the corner and we serve our customers in their own languages. Our goal is to provide top-of-the-line service and sustainability.



The MacGregor scope

MacGregor offers integrated cargo flow solutions for maritime transportation and offshore industries. We are a global company with facilities near ports worldwide. Once our system is in service, we provide lifetime support in the form of maintenance and service solutions that take care of the full lifetime of your equipment.

Our offering for ships includes hatch covers, cranes, RoRo cargo and passenger access equipment, self-unloading systems, lashing systems and Hatlapa deck machinery, steering gears and compressors, Pusnes deck machinery and Porsgrunn steering gear. For ports and terminals, MacGregor delivers linkspans, shore ramps and passenger gangways. For the offshore industry, our product portfolio includes a broad range of advanced solutions for subsea load handling, anchor handling and towing and mooring operations, a wide range of products for maritime research, as well as mooring and loading systems and Woodfield marine loading arms.



Wherever needed, you can rely on our support.



MacGregor offers world leading engineering solutions and services for handling marine cargoes and offshore loads. The scope of our integrated packages is growing and now also includes Hatlapa, Porsgrunn, Pusnes and Triplex products.

MacGregor serves the offshore, maritime transportation and naval logistics markets in ports and terminals as well as on board ships and rigs. MacGregor solutions combine load and cargo access, stowage, care and handling functions to optimise lifetime profitability, productivity and environmental sustainability.

MacGregor is part of Cargotec. Cargotec's class B shares are quoted on NASDAQ OMX Helsinki Ltd.

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