

# MacGregor Training Academy



At your service



**MACGREGOR**

Designed to perform with the sea

# 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 shipbuilders, owners and operators,

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. Our shared values – integrity, quality and safety – propel us forward, and are an important factor in our ability to continue to deliver what our customers need to succeed; solutions that are designed to perform with the sea.

# Update the skills of your crew

Make sure your crew and personnel know how to correctly operate and maintain the equipment installed on your ship, platform or rig. Do not compromise on safety, efficiency or environmental protection.

Maintenance and effective training increase on-board safety, extend the service life of equipment and reduce its environmental impact. We arrange training courses worldwide for offshore, merchant and naval crews. Tuition sessions take place at our training academy centres or on board your vessel or rig. We can also customise a training programme according to your specific needs and operational procedures.

Our programmes include both theoretical sessions and hands-on training. Courses can fully or partly follow the same agenda that we use to train our own service engineers. Another option is to customise training days based on your preferences. Training can include topics such as hydraulic, electrical and mechanical systems, safety procedures, maintenance and spare parts, as well as trouble-shooting.

Following the completion of each training course, you will receive a review and evaluation of each participant's performance.

Providing your crew with full theoretical and practical training courses means that you can rest assured that your equipment and systems are properly cared for and used to their full potential in every situation.



## Benefits

- Improved safety
- Skilled and motivated crew and personnel
- Preventative maintenance extends equipment lifetime
- Continuous operation and reliability
- Reduced negative impact on the environment
- Quicker trouble-shooting
- Increased familiarity and skill for both normal and emergency operation



## Find out more about training opportunities that could benefit your operations:

Virtual training room in Norway	4
Offshore cranes	5
Offshore and subsea load handling	6
Offshore loading systems	7
Offshore mooring systems	8
Deck machinery	9
Steering gear	10
Compressors	11
Emergency launch-and-recovery equipment	12
Shallow-water offshore deck machinery	13
RoRo equipment	14
Cargo cranes	15
Selfloaders	16
Hatch covers	17
Man-rider winches	18



# Improved operations through virtual reality training

MacGregor offers specialist virtual reality training at its training academy in Arendal, Norway. It allows us to help your crews use your equipment safely and efficiently.

## For whom?

Virtual reality (VR) training is an excellent resource for customers who have MacGregor equipment on board their vessels. We can offer your crew fully-immersive training programmes. The simulation platform can also be tailored to specific customer requirements. Our technology is modular and scalable.

## Why?

Our aim is to help our customers use their equipment safely and efficiently. We provide a risk-free environment for learning how to make real-time, complex manoeuvres safe and efficient. The system also showcases simulations of MacGregor products in action and demonstrates technical challenges. This will reduce the likelihood of causing injury to personnel or damage to equipment.

## What does it include?

The VR showroom is divided into two zones comprising an authentic operating chair for offshore crane simulations and a zone where participants can walk around the simulated ship familiarising themselves with the safe operation of the equipment.

### Benefits

- VR offers a risk-free environment for practicing complex manoeuvres
- Your crew will learn to use your equipment safely and efficiently
- Reduced likelihood of causing injury to personnel
- Less damage to equipment



# Offshore crane training

Your crew can practice challenging operations, experiment with new techniques, learn from mistakes and experience realistic consequences under the watchful eye of experienced trainers.



## For whom?

Offshore crane simulator training is designed for both experienced and beginner crane operators.

## Why?

Our state-of-the-art immersive simulator provides operators with unique practical training. They hone their skills, practicing numerous drills, scenarios and challenging lift operations. Your crew will obtain experience that would in reality demand a huge investment in time and pose considerable risks.

## What does it include?

We offer a 3D-simulated environment with numerous variables. It simulates a wide variety of offshore crane types and sizes with a genuine crane control system and full operator interface.

The simulator can be configured to reflect your vessel, crane type, placement and specific load for critical operation rehearsal. It simulates weather, wave direction and height, night and day, depth, load type, component breakdowns, system emergencies and other real world challenges.

## Benefits

- Simulation training reduces risks to crew, damage to cargo and vessel and unexpected downtime and costs
- Operators can practice challenging operations and learn from mistakes
- Your crew will operate your crane with confidence and skill
- Cranes are used to their full potential without compromising safety



# Offshore and subsea load handling training

## For whom?

Our equipment-based offshore and subsea load handling courses are designed for operators, engineers and other personnel on vessels and rigs.

## Why?

MacGregor offshore and subsea load handling equipment will get the job done safely in all conditions. Is your crew properly trained to operate it? Our training improves your crew's knowledge of operational consequences. It ensures complete familiarity with operating modes, alarm settings and proper maintenance.

## What does it include?

Training covers system design, operation, component tips, maintenance, operational limitations and emergency procedures. We also arrange customised courses designed specifically around particular equipment set-ups. All our courses include both theoretical and hands-on practical training.

## Benefits

- Your equipment will perform to its full potential
- Skilled and motivated crew
- Safe working environment





# Offshore loading system training

MacGregor offshore loading system training ensures that your crew can operate your equipment safely and efficiently.

## For whom?

Offshore loading system training courses are aimed at operators and maintenance personnel. We offer courses either at our training centre in Arendal, Norway, at preferred locations or as on-site training.

## Why?

Our training courses ensure that operators have the necessary know-how to safely and correctly operate and maintain their equipment.

## What does it include?

- Introduction to bow loading systems
- QEHS awareness and training
- Component descriptions and basic functions
- Operating procedures for crew
- Control system awareness and training
- Hydraulic system awareness and training
- Testing procedures for equipment
- Equipment maintenance training
- Basic trouble-shooting
- Simulator training
- Additional content by request



## Benefits

- The operators learn to use equipment safely and efficiently
- Better understanding of the control system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime



# Offshore mooring system training

Train your crew with the worldwide leading supplier of Pusnes mooring systems. We offer comprehensive RamWinch training for crew and maintenance personnel.



## For whom?

Pusnes RamWinch training courses are aimed at operators and maintenance personnel. We offer courses at our training centre in Arendal, Norway, at customer-appointed locations or as on-site training.

### Benefits

- Operators learn to use their equipment safely and efficiently
- Better understanding of the control system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime



## Why?

Our training courses ensure that operators have the necessary know-how to safely and correctly operate and maintain their systems.

## What does it include?

- Introduction to offshore mooring systems
- QEHS awareness and training
- Component descriptions and basic functions
- Operating procedures for crew
- Control system awareness and training
- Hydraulic and electrical system awareness and training
- Equipment testing procedures
- Equipment maintenance training
- Basic trouble-shooting



# Deck machinery training

MacGregor is a worldwide leading supplier of deck machinery. Our training academy in Arendal, Norway, offers crew training courses to make sure that deck machinery is operated safely and to its full potential.



## For whom?

Pusnes deck machinery training courses are aimed at operators, maintenance personnel and superintendents.

## Why?

Our training courses ensure that operators and maintenance personnel have the necessary know-how to safely and correctly operate the Pusnes deck machinery installed on board your ship. Courses take place either in Arendal, at a preferred location or on-site.

## Benefits

- Operators learn to use equipment safely and efficiently
- Better understanding of the control system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime



## What does it include?

- An introduction to deck machinery
- An introduction to hydraulic and electrical systems
- QEHS training
- Component descriptions and their functions
- Operating procedures for crew
- Deck machinery testing procedures
- Principles of equipment maintenance
- Basic trouble-shooting

# Steering gear training

We offer customer-specific training courses for Hatlapa and Porsgrunn steering gear.



## For whom?

The courses are aimed for operators and other crew members using Porsgrunn or Hatlapa steering gear.

## Why?

Designing and producing Hatlapa and Porsgrunn steering gear means that we have extensive knowledge and skills and understand better than anyone how this equipment works. Operators will learn to use the equipment safely and efficiently and will develop an in-depth understanding of its control system.

## What does it include?

Courses include lectures, problem-solving exercises, learning activities and exams. Course topics include component descriptions, basic functions, operating procedures, control system training, hydraulic and electrical system awareness, equipment testing procedures, maintenance, basic trouble-shooting and simulator training. Additional content can be arranged by request.

Porsgrunn steering gear courses are offered in our state-of-the-art facilities at the MacGregor training academy in Arendal, Norway, with virtual reality training and classroom session training for rotary vane-type steering gear.

Hatlapa steering gear courses are offered at MacGregor facilities in Uetersen, Germany for piston-type 'Neptun', RAM-type 'Poseidon' and rotary-vane type 'Triton' steering gear. Our courses can be arranged at other locations around the world on request.

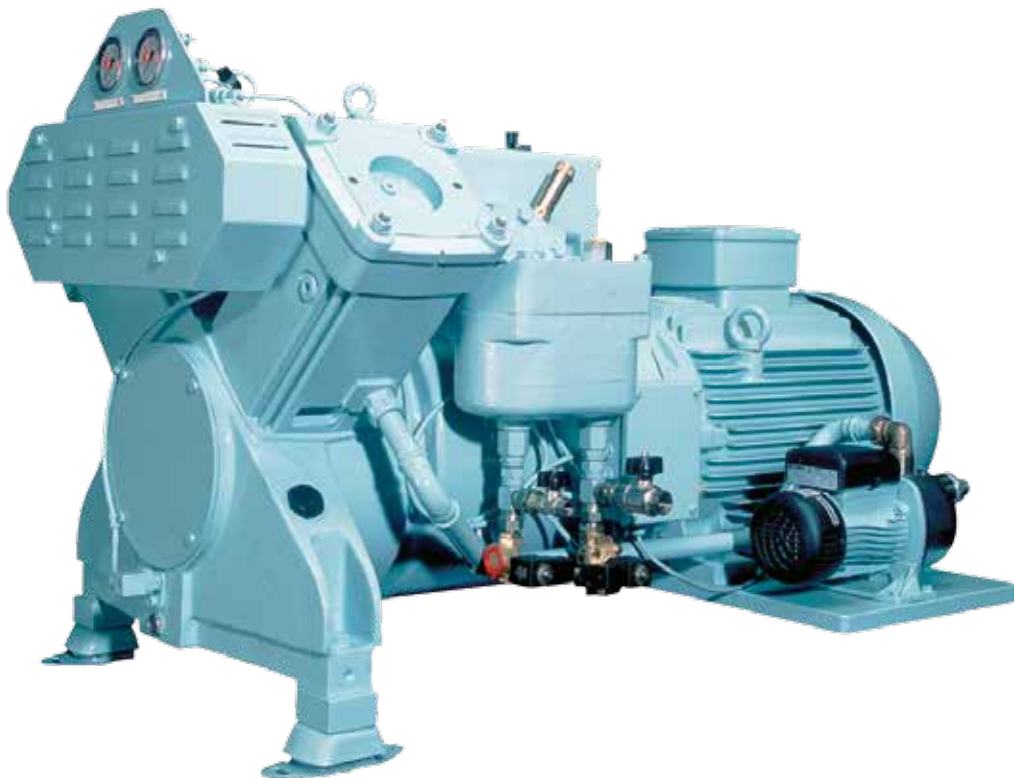
## Benefits

- Operators learn to use equipment safely and efficiently
- Better understanding of the control system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime



# Compressor training

Train your crew on a customer-specific training course for Hatlapa compressors.



## For whom?

The training is aimed at operators and other crew members using Hatlapa compressors.

## Why?

We have the expert knowledge to teach operators how to use compressors safely and efficiently. Our facilities in Uetersen, Germany, develop and supply compressors to provide starting air for main diesel engines and generator engines on small, middle-sized and large ships.

## What does it include?

Courses include lectures, problem-solving exercises, learning activities and exams. Session topics cover component descriptions, basic functions, operating procedures for crew, hydraulic and electrical system

understanding, equipment testing procedures, maintenance and basic trouble-shooting. Additional content can be arranged by request.

Our courses can be arranged at preferred locations around the world.

## Benefits

- Operators learn to use equipment safely and efficiently
- Better understanding of the control system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime





# Emergency launch-and-recovery equipment training

Let us train your professionals into specialists. MacGregor's training centre in Aberdeen, Scotland, UK, offers high-quality emergency launch-and-recovery equipment training for your crew and personnel.

## For whom?

Ship's crews from across the world would benefit from participating in our emergency launch-and-recovery equipment training and development programme.

## Why?

The high level of skills required to be a world-class specialist is key to our training programme. After the training course, your crew will be competent specialists equipped with excellent practical skills.



## What does it include?

The crew training sessions consist of technical theory and practical training. The practical elements are technical davit engineering and inspection, hydraulics and fault-finding training. Central to the training centre is a bespoke, real-time davit training rig, which replicates the operation of on-board workboat and lifeboat launch-and-recovery davit systems including towing boom operation.

Our training programmes are designed to be offered to groups of up to five crew members at a time. They can be arranged at our training centre in Aberdeen, which leads launch-and-recovery services within MacGregor's Global Lifecycle Support division.

## Benefits

- Crews will have versatile emergency launch-and-recovery equipment skills
- Equipment will be used in a safe, efficient way
- Practical training provides crews with useful hands-on skills
- Better safety standards on board



# Shallow-water offshore deck machinery training

Ensure your crew is trained to keep your deck machinery up and running. Our training centre in Singapore arranges shallow-water offshore deck machinery courses that meet the practical needs of your crew.

## For whom?

Deck machinery courses are aimed at customers' crew and personnel, and are also attended by our own service engineers.

## Why?

Our training sessions in Singapore equip your crew with basic to advanced-level skills and knowledge for more efficient deck machinery maintenance and troubleshooting. Following our programme, your crew will have a better understanding of how the equipment operates.

## What does it include?

The five-day training programme consists of lectures, case studies and hand-on sessions. Basic troubleshooting of commonly encountered problems will be explored. We also offer customised training adapted to your needs.

## Essential course topics

- Equipment in relation to different vessel types
- Anchor handling/towing winches (AHTW)
- Hydraulic mooring winches (HMW)
- Bulk handling systems (BHS)
- Electrical control systems on the winch



## Benefits

- Crew will carry out efficient maintenance
- Better understanding of equipment operation
- Quicker trouble-shooting
- Knowledge of correct terms and information assists with support and spare parts ordering from OEM



# RoRo equipment training

RoRo training ensures that your crew knows how to handle all cargo access equipment on board safely.



## For whom?

RoRo crew training courses are aimed at merchant and naval crews.

## Why?

MacGregor's integrated solutions optimise and enhance the functionality of RoRo vessels. Our flexible cargo access equipment provides the fastest possible loading and discharging times. RoRo crew training will help your crew use your equipment efficiently, quickly, safely and in the correct way.

## What does it include?

RoRo crew training sessions are arranged at our RoRo competence training centre in Gothenburg, Sweden. It is

possible to customise training programmes according to your specific needs on board your vessel.

## Benefits

- Your crew members learn to use your equipment safely and efficiently
- Better understanding of the cargo access system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime





# Cargo crane training

Update your crew's crane operating skills. You will improve safety, reduce cargo and vessel damage, motivate your crew and increase the profitability of your operations.

## For whom?

MacGregor crane training is aimed at ship's crews, superintendents and office personnel. It is especially useful for new shipowners and new crews on new vessels.

## Why?

It is important that your crew understands how to operate and maintain the MacGregor cranes installed on your ship. Training maximises a product's lifetime, reduces wear and improves its operating efficiency and safety.

## What does it include?

Our training courses are adapted to meet your specific requirements. The two-day theoretical training programme includes hydraulic, electrical and mechanical systems, safety procedures, maintenance, spare parts, trouble-shooting and normal and emergency operation. Course materials will be provided on a USB memory stick.

Training sessions also include hands-on practical guidance with different crane control systems and trouble-shooting control and electrical systems. They

can be arranged at our training centre in Sweden or at a preferred location.



## Benefits

- Improved safety
- Skilled and motivated crew
- Preventative maintenance extends equipment lifetime
- Continuous operation and reliability
- Quicker trouble-shooting
- Increased profitability



# Selfunloader system training

Let us improve the skills of your crew. It is important that your crew understands how to operate and maintain the MacGregor self-unloading system installed on your ship.

## For whom?

Self-unloading system training is aimed at ship's crews, superintendents and office personnel. It is especially useful for new shipowners and new crews on new vessels.

## Why?

By training your crew, you will maximise the product's lifetime, reduce wear and improve its operating efficiency and safety.

## What does it include?

Our training course consists of theoretical and practical training. It takes place at our training centre in Sweden or at a preferred location. It will focus on the system installed on your ship. Tailored training can also be arranged.

Theoretical training includes the mechanical system, hydraulic system, electrical system, maintenance, spare parts, function, trouble-shooting and normal and emergency operation. The course material is provided on a USB memory stick. Practical training includes hands-on training sessions and trouble-shooting different components. The best option is to combine theoretical training with a visit on board your ship.

## Benefits

- Improved safety
- Skilled and motivated crew
- Preventative maintenance extends equipment lifetime
- Continuous operation and reliability
- Quicker trouble-shooting
- Increased profitability



# Hatch cover training

Our skilled engineers are at your service worldwide for specialised cargo handling equipment training.



## For whom?

Our hatch cover training sessions are tailor-made for ship's crews and personnel.

## Why?

After our training courses, your crew will have the necessary know-how to safely and correctly operate and maintain your cargo handling equipment.

## What does it include?

Steel hatch covers are at the very core of our business. Our skilled service engineers are at your service worldwide. They will visit your ship to carry out maintenance, inspections and repairs. Our engineers have gone through extensive training programmes; they will train your crew to use your equipment safely and efficiently.

All training courses are tailored according to your needs. Let us know how we can help you and what kind of training programme your crew requires.

## Benefits

- Your crew members learn to use the equipment safely and efficiently
- Better understanding of the cargo handling system
- Better understanding of components and technical details
- Quicker trouble-shooting
- Preventative maintenance extends equipment lifetime





# Man-rider winch onshore training

The MacGregor man-rider winch onshore training takes place in Bergen, Norway. The type of winch used in training is customer specific to ensure maximum benefits for each crew.

## For whom?

The man-rider winch onshore training is relevant for winch operators, electricians and deck crew as well as maintenance personnel, mechanics and hydraulic system planners.

## Why?

Customised training maximises the lifetime of the winch, reduces wear and improves its operating efficiency and safety.

## What does it include?

The one-day training course takes place at MacGregor's premises in Bergen, Norway. It focuses on the operation, safety and maintenance of MacGregor man-rider winch types HY1994a or RS2003a. The type of winch used in training is customer-specific for each course.

It includes classroom training, a workshop and test stand training. MacGregor provides all the necessary personal protective equipment (PPE) for the workshop training. A competence certificate is issued after the completion of the practical training and final exam.

## Benefits

- Improved safety
- Better understanding of the control system
- Preventative maintenance extends equipment lifetime
- Efficient operation and reliability
- Quicker trouble-shooting



# The right parts and services, in the right place, at the right time

MacGregor's mission is to safely provide the fastest possible supply of spare parts, maintenance services and technical support for all customers, wherever in the world they operate.

## **Spare parts and logistics**

Using the wrong spare parts, or ignoring the need to replace worn parts in time, can lead to equipment malfunction and other serious problems.

MacGregor supplies original spare parts and components (hydraulic, electronic and mechanical) to any worldwide destination from its logistics centres located in Asia, North America and Europe.

## **Maintenance and damage repairs**

MacGregor can undertake any minor or major repair work, conversion or modernisation of cargo handling equipment. Work starts with a consultation process where a thorough inspection of equipment is carried out. Through MacGregor's lifetime analysis, it can determine whether equipment can be repaired, converted or modified, therefore extending its productivity.

MacGregor repair services are offered on a planned schedule, on demand or on an emergency basis.



## **Worldwide experts at your service 24/7**

Close and continuous collaboration between MacGregor's network of field services, product competence centres and new sales units ensures precise, quick and efficient support for all customers.

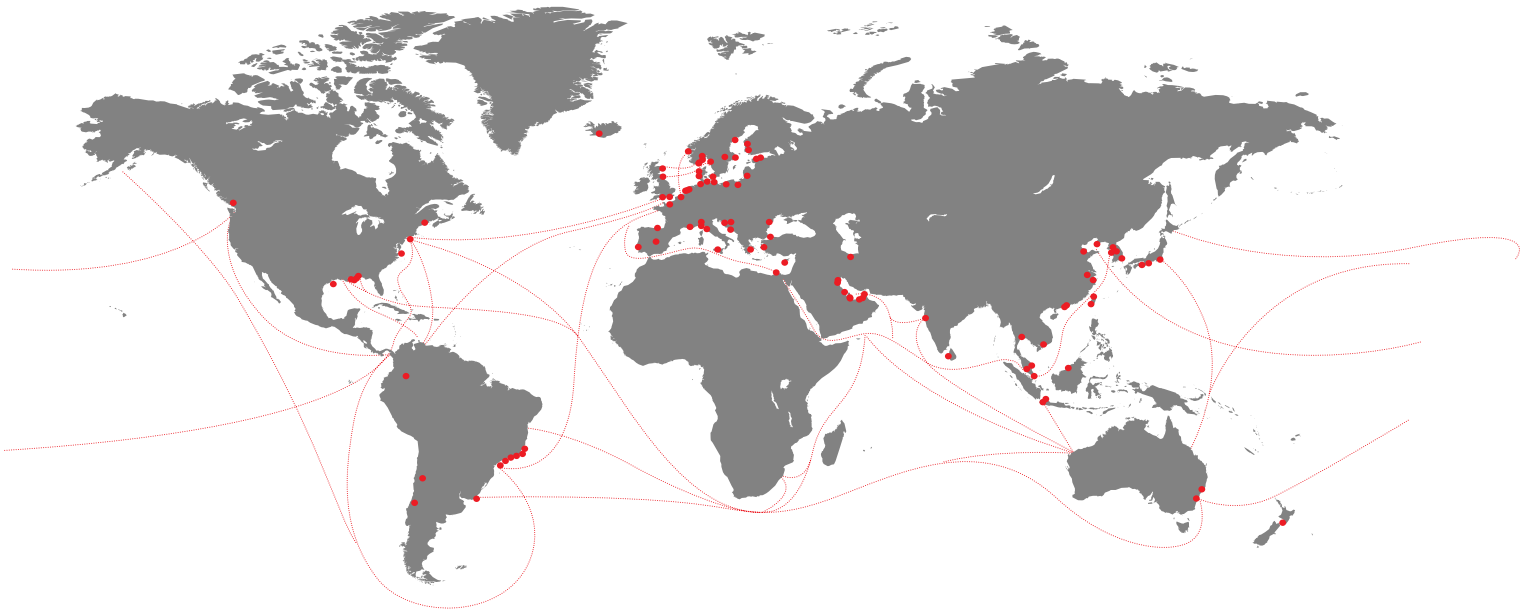
MacGregor operates in around 50 countries and its service network consists of service centres in major ports around the globe, staffed by specialists.

### **MacGregor service portfolio**

- Spare parts and logistics
- Maintenance and repairs
- Conversions and modernisations
- Inspections
- Pre-drydocking services
- Drydocking services
- Service contracts
- Training for crew and personnel
- Remote diagnostics
- Support services

Wherever needed, you can rely on our support.  
We serve the following brands globally, and we also serve all others.

- Ankerlökken Marine
- Allset
- ASCA
- Becker
- BMH
- Conver-OSR
- Grampian Hydraulics
- Flintstone
- Greer Marine
- Hamworthy
- Hatlapa
- Hydramarine
- Häggglunds
- Interschalt
- KGW
- KYB - ASCA
- KYB - Kayaba Industries / Navire Cargo Gear
- Luezhoe
- MacGregor
- MacGregor-Conver
- MacGregor-Häggglunds
- MacGregor-Kayaba
- MacGregor-Navire
- Navire Cargo Gear
- Nordströms
- Ozean Service & Reparatur
- Platform Crane Services (PCS)
- Plimsoll
- Pusnes
- Porsgrunn
- Triplex
- Vestnorsk Hydraulikkservice (VNH)



MacGregor shapes the offshore and marine industries by offering world-leading engineering solutions and services with a strong portfolio of MacGregor, Hatlapa, Porsgrunn, Pusnes and Triplex brands. Shipbuilders, owners and operators are able to optimise the lifetime profitability, safety, reliability and environmental sustainability of their operations by working in close cooperation with MacGregor.

MacGregor solutions and services for handling marine cargoes, vessel operations, offshore loads, crude/LNG transfer and offshore mooring are all designed to perform with the sea.

*MacGregor is part of Cargotec (Nasdaq Helsinki: CGCBV).*

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