

Optimising overall functionality of your ships – integrated anchor handling, towing, mooring and subsea load handling solutions



Winches

## **Operational profitability**

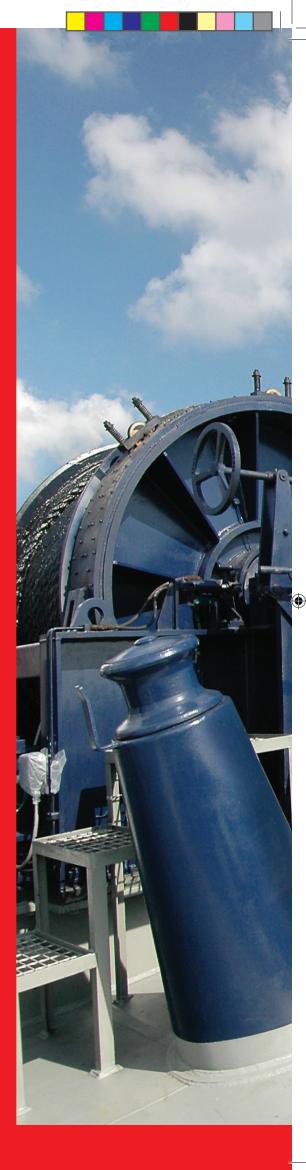
through pioneering technology, reliability and lifelong sustainable performance.

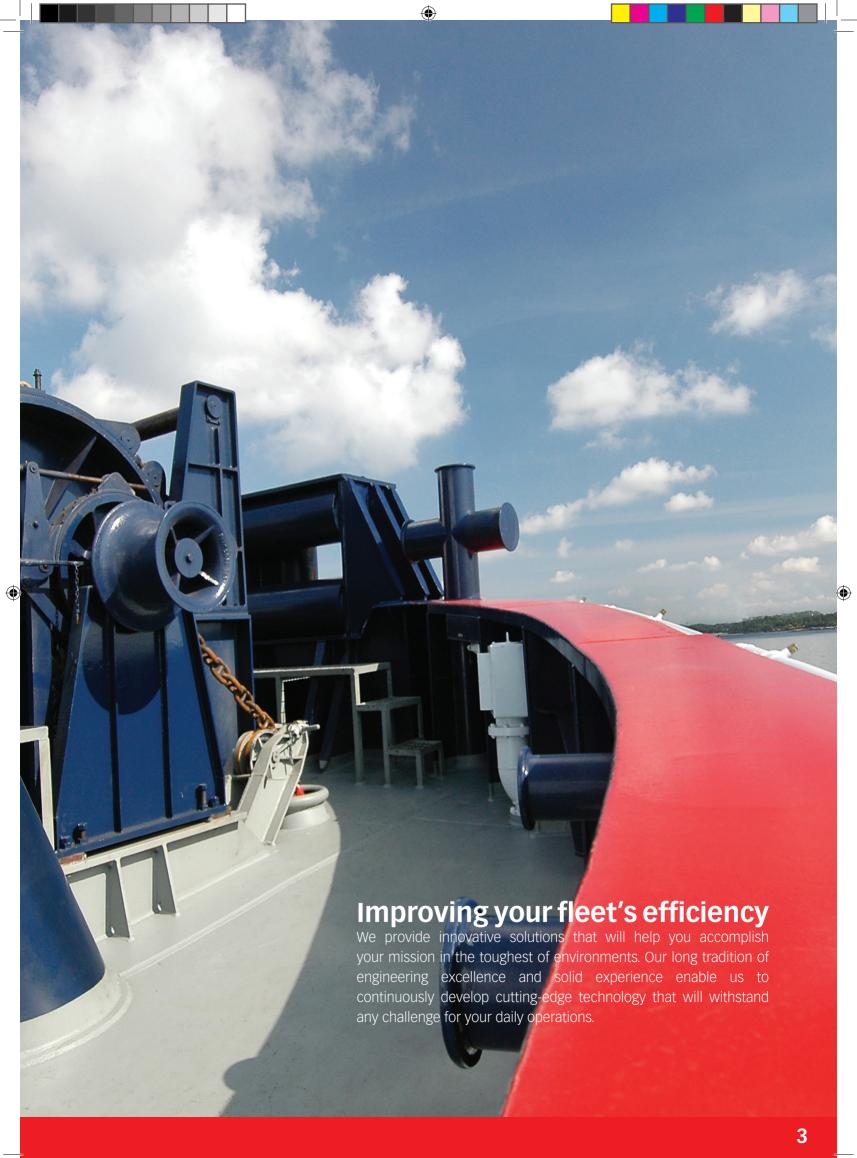
Cargotec is the world-leading provider of comprehensive marketdriven engineering solutions for installation on offshore vessels and rigs under the respected MacGregor brand. It is our strategic aim to benefit our customers by driving innovation and taking the lead in further developing the industries we are in.

Optimising long-term safety and efficiency of your offshore operations is best attained when your specific operational requirements are the primary focus. We are committed to leveraging our expertise and in-depth understanding of your business processes to design comprehensive solutions for your type of vessel and its specific operational requirements.

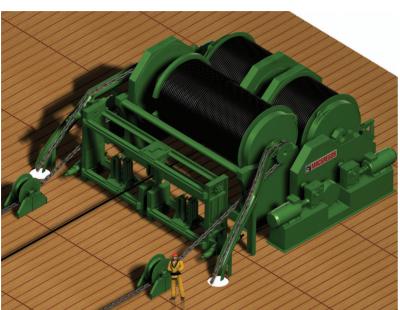
We understand the offshore industry's ever growing demand for operational flexibility and increased equipment reliability. Cargotec offers MacGregor solutions designed to expand the operational envelop on all fronts. That means longer hours, more days, in more demanding conditions, while maintaining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

Your success is our mission





## Anchor handling solutions



## Electric Anchor Handling / Towing Winch (eAHTW)

SWL: Up to 600 tonnes with huge drum for wire or synthetic rope



Chain Guide, Guide Roller And Chain Hauling Winch



Capstan SWL: 5 to 20 tonnes, optional with wire handling drum





Tugger Winch SWL: 5 to 30 tonnes, optional with manual & hydraulic brake & clutch control



Shark Jaws / Towing Pins SWL: Up to 750 tonnes







### Anchor Handling / Towing Winch

SWL: Up to 600 tonnes for available in electrical VFD & hydraulic drive



MacGregor Deck System, (DHMS)

Increase safety and operability onboard AHTS vessels. DHMS combines the chain and wire gripper into a single, flexible and safe system to be installed on deck or cargo rail cranes.



## Cargo Rail Crane

Fitted on cargo rail vehicle, able to move forward/after the cargo rail for provision handling & other deck handling works on deck.





Windlass / Mooring (Towing) Winch

Available with single or double for wire

## **Other Equipment:**

- AHC Crane
- **Provision Crane**
- Stern Roller
- A Frame
- Rescue Davits & etc



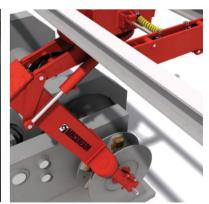
Secondary Winch / Storage Reel

SWL: Up to 250 tonnes for wire or synthetic hawser



#### **Control Panel**

Fully automated HMI panel with length & tension control/monitoring



Chain Guide Manipulator

SWL: Up to 12.5 tonnes changing chain wheel at sea

5

### •

# Towing solutions for harbour, ocean going terminal support & escort tugs



Windlass / Mooring (Towing) Winch

SWL: Up to 150 tonnes bollard pull, available in both electrical & hydraulic drive



## Automated Render / Recovery Escort Hawser Winch

SWL: Up to 150 tonnes bollard pull, available in both electrical & hydraulic drive



Anchor Chain Stopper
Available in both knife and roller type



Vertical Capstan SWL: 3 to 20 tonnes, optional with wire storage drum



Anchor Windlass / Mooring Capstan Available in electric & hydraulic drive vertical or horizontal

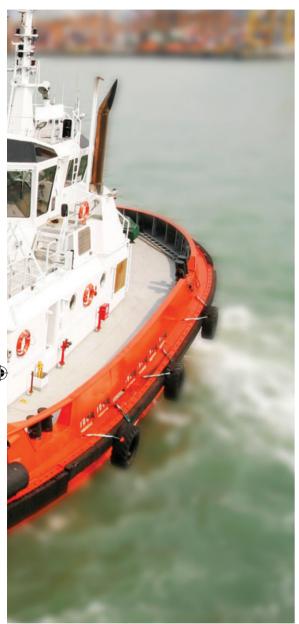
arrangement



Automated Length / Tension Control & Monitoring System









**Double Drum Towing Winch** 

SWL: Up to 150 tonnes bollard pull, available in both electrical & hydraulic drive for wire & hawser



Tugger Winch SWL: 5 to 20 tonnes



Storage Reel SWL: 3 to 50 tonnes



Disc Type Tow Hook c/w manual, hydraulic and pneumatic quick release up to 150 tonnes SWL



Marine Crane
SWL: multi telescopic/ foldable jib up to 40 Ton-meter, optional with class certificate & radio remote control

# Mooring solutions for offshore support vessels, accommodation/work/ lay barge



Lattice Boom Crane

SWL: Up to 600 tonnes, available in electro-hydraulic & diesel hydraulic driven



Remote Control with Length & Tension Monitoring System

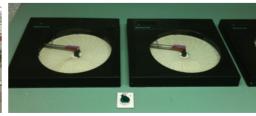
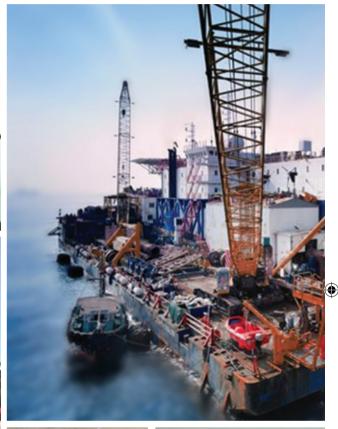


Chart recorder

## Hydraulic Mooring Winch

SWL: Up to 600 tonnes line pull & 800 tonnes brake holding, optional with friction clutch





For tension and length measuring



**Pneumatic Winch** 

SWL: Up to 30 tonnes



Maclinear For tension and length measuring



## Electric Mooring Winch

SWL: Up to 600 tonnes line pull & 800 tonnes brake holding, optional with friction clutch



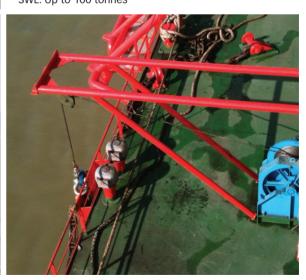




Pipe Handling Davit
SWL: Up to 100 tonnes



**Guiding Sheaves & Swivel Fairlead** 



Bridel Retriever Winch SWL: Up to 30 tonnes



## Retain flexibility with integration where and how you want it

Cargotec has years of experience producing advanced systems that benefit from integration on different levels. Such integration can have great benefits but doesn't need to come at the cost of flexibility.

Any of our systems can be designed for full integration into vessel newbuild projects or modularised for easy placement in existing vessels. Mechanical design can be adjusted to suit specific interface prerequisites. Power requirement can be met by dedicated HPUs or by integration with a vessel ring-line system. Power management systems can be integrated into the vessel's power generation system for improved safety and efficiency. Control systems themselves may be integrated into the ship's own control and/ or monitoring stations as well as in dedicated and remote operating panels. Controls for related equipment can also be integrated into a common interface. And integration doesn't stop there.

You, the owner can specify exactly how much and what type of integration best suits your needs. You benefit from greater efficiency and still retain the flexibility you need.

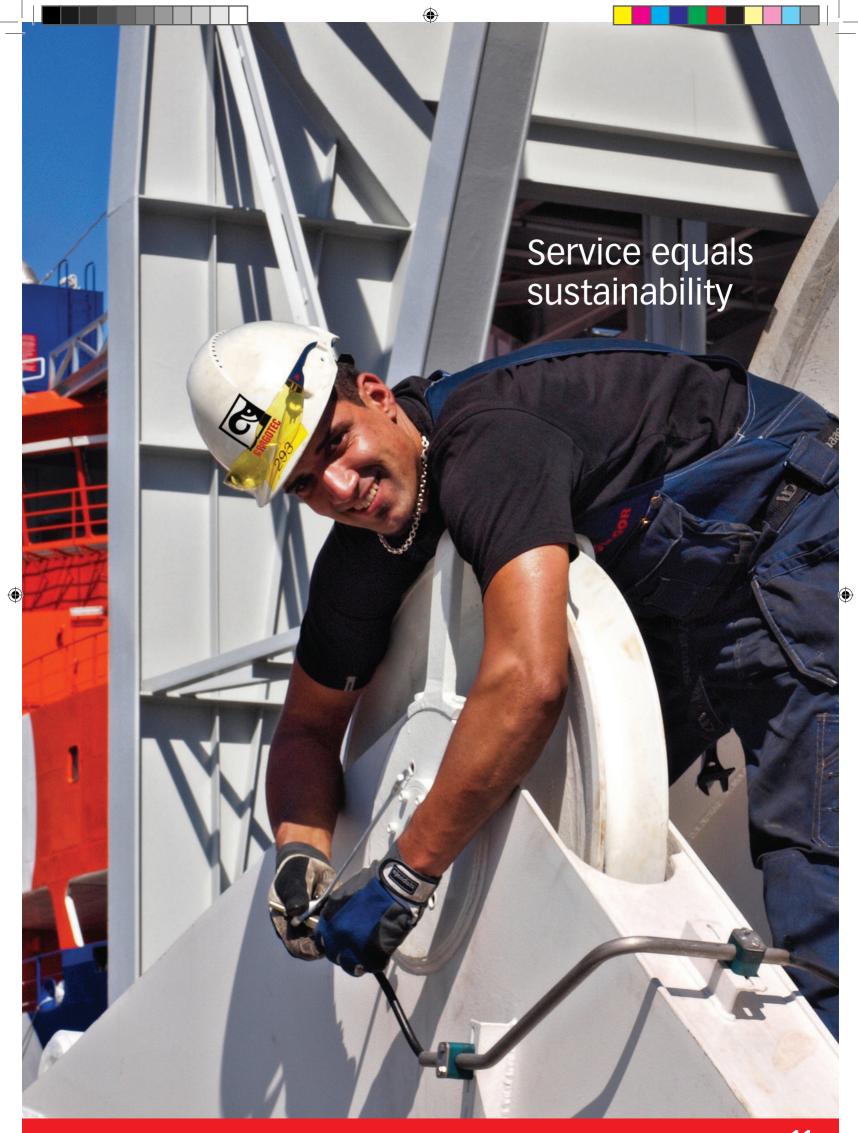
# Life-cycle efficiency improves your business

Our goal is to increase value by providing top-quality service and sustainability throughout the complete life-cycle of our products. Cargotec offers you a full service portfolio, including its MacGregor Onboard Care (MOC) concept, designed to meet your strategic and tactical needs. An MOC agreement offers the opportunity to compose a unique mix of services to meet your specific requirements.

**Availability support, on board maintenance, spare parts management and customer training** are the four elements of an MOC agreement, which offers you sustainable ship operations and revenue earning capabilities by ensuring the operative availability through planned maintenance solutions and our global service network.

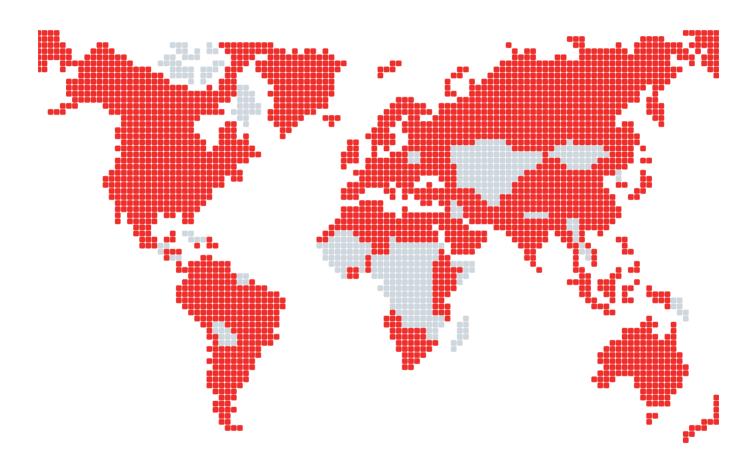
With an MOC agreement, you can concentrate on your core business.







# Global presence and local service bring our solutions closer to our customers.





that the Quality Management System for Cargotec Marine is ISO 9001:2008 compliant Cargotec improves the efficiency of cargo flows on land and at sea – wherever cargo is on the move. Cargotec's daughter brands, Hiab, Kalmar and MacGregor are recognised leaders in cargo and load handling solutions around the world.

**MacGregor** is the global market-leading brand in marine cargo handling and offshore load-handling solutions. Customer-driven MacGregor engineering and service solutions for the maritime transportation industry and the offshore load-handling and naval logistics markets are used on board merchant ships, offshore support vessels, and in ports and terminals.

Published by Cargotec Corporation. Copyright © August 2012. All rights reserved. No part of this publication may be reproduced, stored photocopied, recorded or transmitted without permission of the copyright owner.



Cargotec CHS Asia Pacific Pte Ltd Offshore Winches

15 Tukang Innovation Drive Singapore 618299 Tel: +65 6597 3888 Email: ofs.sgp.salesmfg@cargotec.com

Co. Reg. No. 199404157W www.cargotec.com

