

Electric cranes

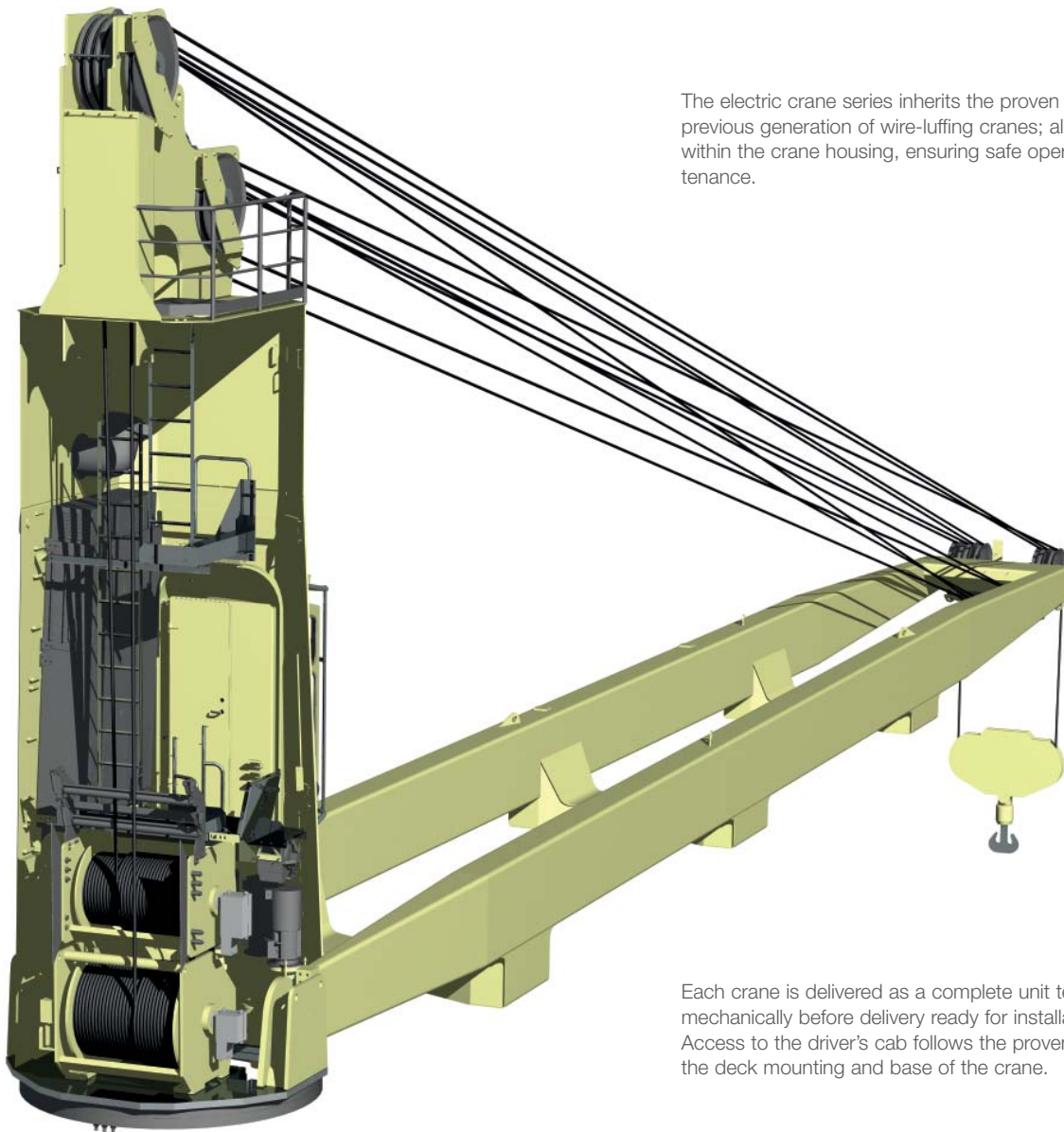
Effective, power efficient and environmentally sustainable



MACGREGOR
Designed to perform with the sea

Electric Cranes with Variable Frequency Drive System

MacGregor electric cranes are improving overall efficiency, lower power consumption, lower maintenance and spares cost, translating to lower total operating costs and ultimately a lower environmental impact.



The electric crane series inherits the proven characteristics of the previous generation of wire-luffing cranes; all machinery is enclosed within the crane housing, ensuring safe operation and ease of maintenance.

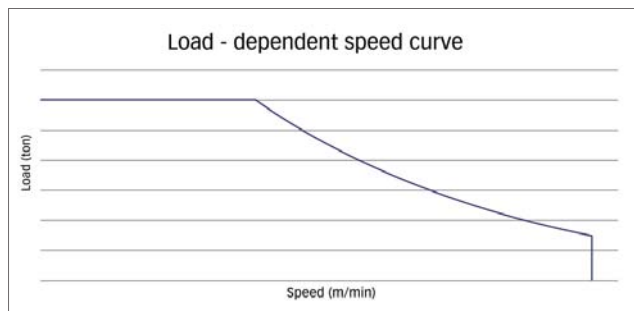
Each crane is delivered as a complete unit tested electrically and mechanically before delivery ready for installation on board. Access to the driver's cab follows the proven internal route through the deck mounting and base of the crane.

A lower environmental impact

- No hydraulic oil
- Low noise level
- Energy savings from low starting current and from not having to continuously run the crane machinery
- Regenerated and consumed power are monitored
- Control of power consumption/back power
- Lower energy consumption (between 35 and 50 per cent)
- Less power consumption will affect the generator capacity and sizes depending on shiptype

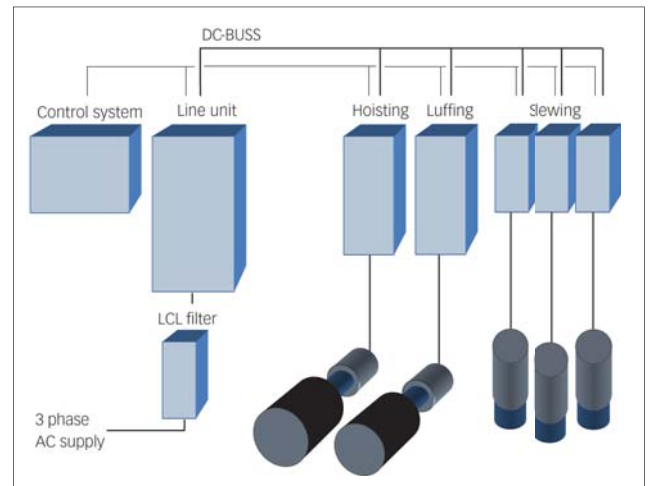
High cargo-handling efficiency

- Improved operational performance
- Short response times
- Maximum speed based on actual load
- Exact position of the load is maintained even with open brake
- Short cycle times due to higher speeds
- More precise operation ensuring easier control and load positioning
- Precise indication of load and outreach



Service and maintenance

- Extended lifetime of major drive components
- Maintenance friendly
- Less moving components
- Lower maintenance costs
- Fewer consumables
- Improved fault-finding
- Easy access to data for trouble-shooting



Basic system design

Reduced cost of investment

- Aux engines might be downsized
- Reduced cable area from Aux engines to cranes
- No hydraulic oil to be filled

Safety

- Diagnostic check at start-up procedure
- Overload protection with load cell as standard
- Crane performance will automatically adjust when operating in extremely high temperatures to avoid down time
- Humidity: Anti-condensation heating in the cabinets (24/7)

Human Machine Interface (HMI)

MacGregor Crane Information System



Real-time information on active systems

Load/speed/outreach information

Logs information for analysis

Errors/warnings/events

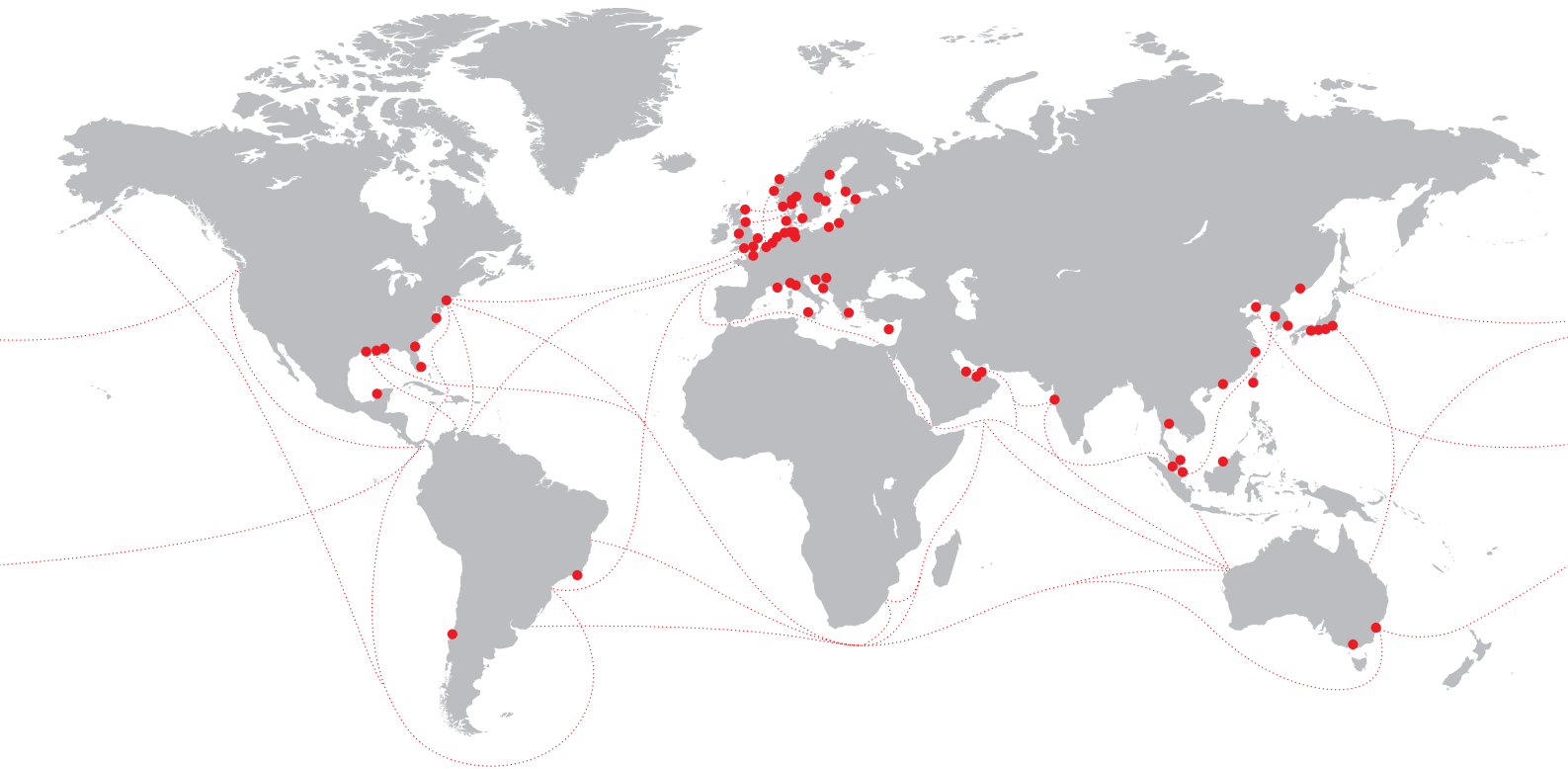
Touchscreen display

The crane information system continuously provides the driver with real-time weight and outreach data.

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Wherever needed, you can rely on our support.



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. Cargotec's class B shares are quoted on NASDAQ OMX Helsinki Ltd.

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