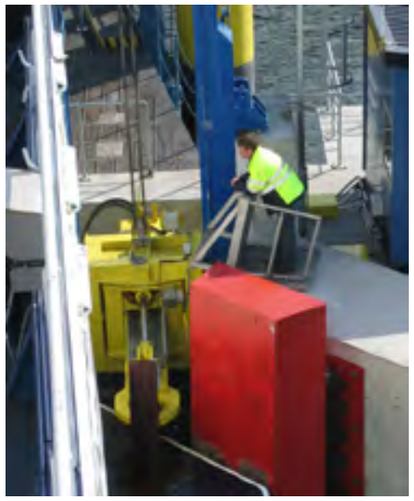
MacGregor auto-mooring system

Traditional mooring is risky and hard work.



MacGregor auto-mooring is fast, safe, easy to operate and reduces time in port.

Traditional mooring can be very time consuming. There is always a risk of injury to workers onboard the ship and on shore during the mooring process. Mooring lines led to bollards ashore at different angles from the ship's various fairleads have never been totally reliable. They wear out and sometimes a line parts which can result in damage to the ramps if the ship moves.

The design and installation of the first MacGregor auto-mooring units date back to the beginning of the 1990s. The main design criteria were to minimise the turnaround time for ferries in ports. Added values gained were the removal of the need for mooring ropes, which had reduced port stevedoring capacity, as well as enhancing the safety in the interface between the ship, shore ramps and the access gangways.

Key features

- Remote operation by radio control from the ship's wheelhouse
- Short operating times – less than one minute
- Independent of tidal variations
- Optimised mooring force – horizontally acting
- Simple bollard attachment on the ship
- Service-free installation onboard the ship
- About 20 berths in Northern Europe are currently using MacGregor auto-mooring units for their ferry operations
- Key to the functional superiority of the auto-mooring unit is the fact that the strain angle – the mooring force – is always kept horizontal, reducing the required force to hold the ship, and at the same time accurately maintaining its position.

Arrangement options

Most commonly, and particularly on ships without stern ramps and on train ferries, is the utilisation of a king pin function on the access ramps, adding an auto-mooring unit for purely transverse mooring to the quay.

A configuration where a stop fender arrangement is available allows two units to be installed along the quay, where one unit is radially installed to incur longitudinal strain against the stop fender. For light ships, in particular catamarans with dedicated linkspans, the auto-mooring can be entirely integrated in the linkspan function. The advantages of an automated mooring system are unquestionable.

Safe, fast and easy to operate

Ferry operators demand reduced times in ports and lower labour costs. A MacGregor auto-mooring system meets these needs. The system is fast and easy to operate and there is a reduced need for human resources.

Mooring takes time and if the ship is on a route where port calls are made several times a day, it is worthwhile considering the installation of an auto-mooring system in the harbour. Auto-mooring systems offer significant benefits in terms of safety. They are remotely operated from the ship, independent of tidal variations and provide an optimised mooring force.

References (extract)

MOOREX 22T/10T onboard unit
Completed: 2006/2010
Client: Bornholmstrafikken
Vessels: M/S Dueodde (2 pcs) and
M/S Hammerodde (2 pcs)

MOOREX 25T onboard unit
Completed: 2000-2006
Client: Finnlines
Vessel: M/S Finneagle (3 pcs),
M/S Finnclipper (4 pcs) and
M/S Finnfellow (2 pcs)

MOOREX 30T quay side unit
Completed: 2004
Client: Destination Gotland
Port: Visby (4 pcs),
Nynäshamn (2 pcs) and
Oskarshamn (2 pcs)

MOOREX 60T/30T quay side unit
Completed: 2007
Client: Finnlines
Port: Travemünde/Lübeck (2 pcs),
Helsinki (2 pcs) and
Malmö (1 pc)

MOOREX 35T quay side unit
Completed: 2009, 2010
Client: Marine Atlantic
Port: Port of Basques (4 pcs),
North Sydney (4 pcs)

Global service on local basis

Operative availability
MacGregor's ambition is to ensure the operative availability of your cargo flow systems. Our experts are on standby worldwide to provide a rapid response to your needs.

Global presence 24/7
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.

Planned maintenance
MacGregor's planned maintenance concept is supported by the solid foundation of our worldwide service network, and allows you to plan your operating budget.

On-demand service
Our service centres worldwide solve problems as they arise, helping to keep the ship up and running. We also provide a comprehensive damage assessment and repair service.

MacGregor Onboard Care (MOC) service contracts
An MOC service contract offers a modular service concept where you can choose the necessary modules to suit your individual needs in terms of operating security, budgets and comfort.

Crew training
Tailor-made theoretical and hands-on crew training in the maintenance and operation of MacGregor equipment and systems.

Drydockings
Let us know your schedule well in advance and we will plan drydocking services for you accordingly.

Modernisation
MacGregor has the expertise and the resources to upgrade ageing cargo access equipment to the latest performance standards.

Conversion
Our conversion packages adapt, enhance or change the original functionality of the system, re-designing it to meet changing market requirements. Our solutions are built around expertise and long-lasting, reliable products, giving you the highest return possible on your investment.

MacGregor's conversion products include standardised as well as new products to facilitate your ship's new role and improve its competitiveness. MacGregor equipment are easily installed in all types of ships and ensure maximum levels of both security and quality.