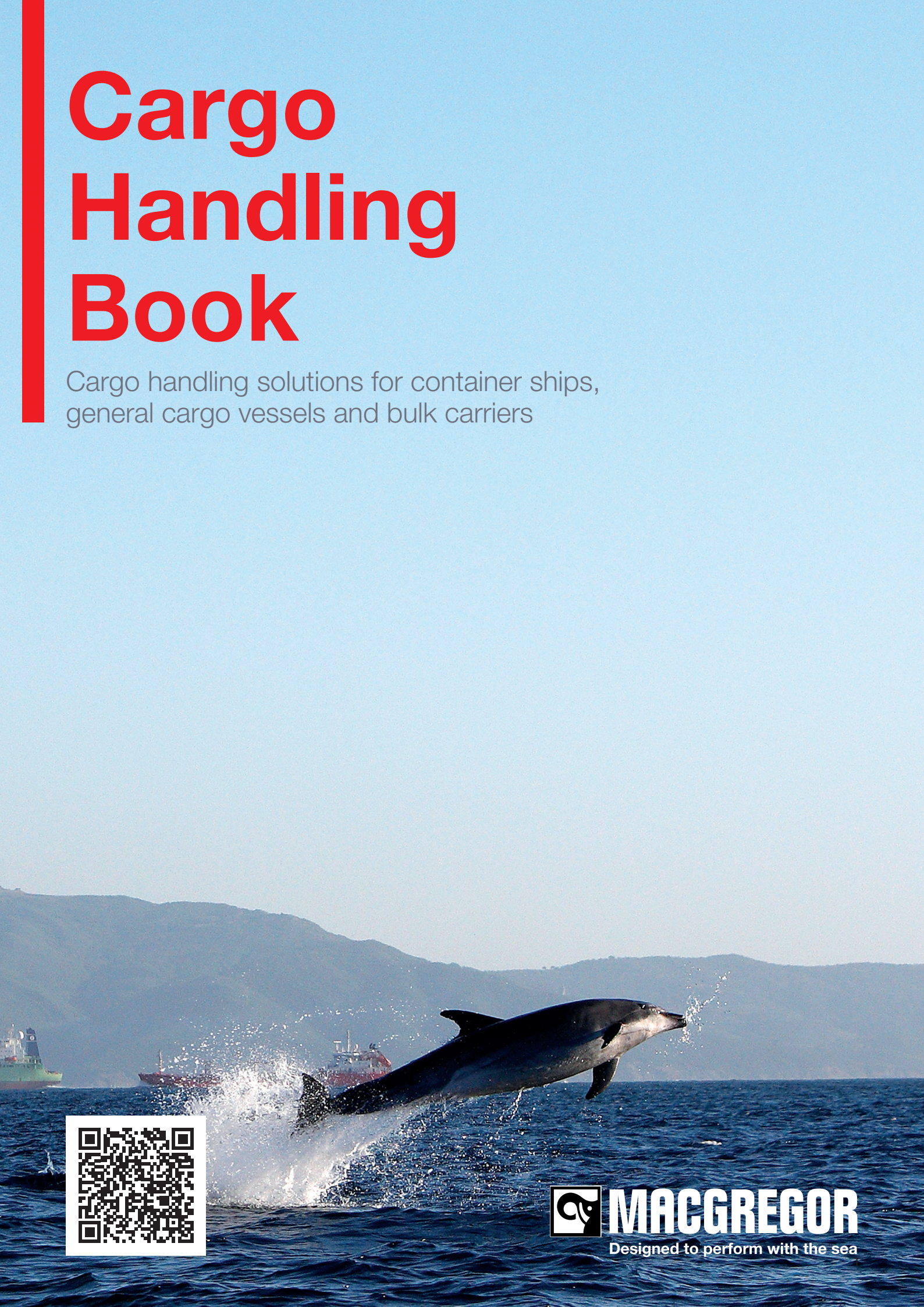
Cargo Handling Book

Cargo handling solutions for container ships, general cargo vessels and bulk carriers



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Designed to perform with the sea

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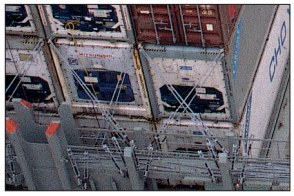
Container ships

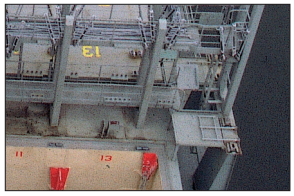
Hatch covers

Lashing bridges

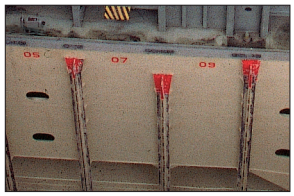
Container fittings on deck



Loose container fittings (twistlocks, lashing bars, turnbuckles)



Container stanchions



Cell guides in hold

The best container stowage solutions are built around their intended cargo

An efficient container stowage solution can only be achieved by treating the ship's hull and its cargo handling system as a single optimised entity. Consequently, parts of the container stowage system, such as the hatch covers, lashing bridges, container stanchions, loose and fixed container fittings on deck and in the holds, and the cell guide system in the cargo holds, should be considered from an overall container stowage solution point of view, not as separate products.

MacGregor is unique as the only supplier who can design and deliver all these products, enabling us to take a whole-ship approach and make the most of each ship's container stowage system.

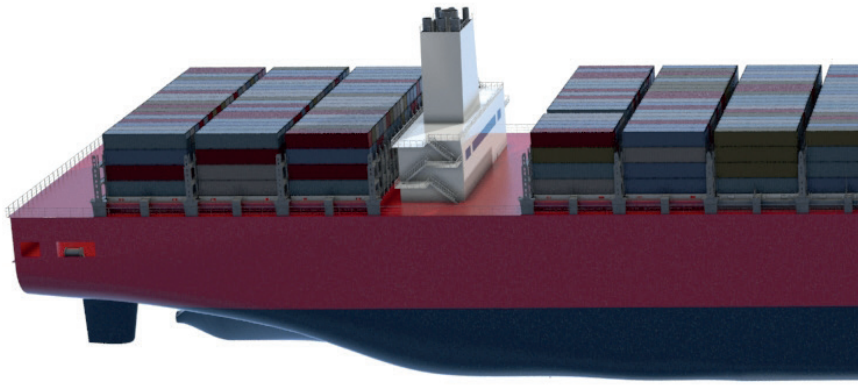
Built-in efficiency

The more efficient the container stowage solution is, the greater the number of payload TEUs a ship can carry, which, in turn reduces the cost and emissions per carried TEU and subsequently per transported commodity, and at the same time increases the ship's profitability and income.

Container ships

- Lift-away hatch covers
- Lashing bridges
- Fixed container fittings
- Loose container fittings
- Container stanchions
- Cell guide systems in hold and on deck
- Lashing mock-up tests to verify performance
- Lashing software
- Complete hatch cover and lashing bridge steel structure manufacturin
- GL cargo crane
- GLE cargo crane
- LC cargo crane
- Steering gears
- Compressors
- Deck machinery
- Global lifecycle support
- MacGregor PlusPartner solutions

MacGregor knows how to get all the parts of a cargo handling system to work in unison, ensuring that a vessel sails with the best possible performance.



The design criteria for a feeder vessel's container stowage solution differ completely from the criteria for an ultra large container carrier, and so do their container securing systems. Whatever the size of the vessel, MacGregor knows how to design and deliver an efficient cargo handling and stowage system for containerised cargo.

MacGregor knows how to get all the parts of a cargo handling system to work in unison, ensuring that a vessel sails with the best possible performance.

Building a new container vessel is a major investment and the decisions taken at the early design phase will define the loading capacity throughout the vessel's lifetime. Optimisation of the loading capacity can lead to increased earnings. For example, with an improved system the vessel may be able to carry one extra tier of loaded containers.

MacGregor can advise shipowners from the outset, at the earliest point when ideas for a new vessel are conceived. It can be a design expert during the project through to delivery, and a service partner throughout the vessel's lifetime.

MacGregor's involvement at an early stage makes it possible to achieve an optimised custom-made container stowage solution, with a lashing system designed for all operational criteria. The design of the container stowage solution for a new vessel involves many different steps. MacGregor knows what is needed to ensure that all parties get the correct information at all stages of the project. It can deliver a total solution, including all documentation from the whole system through to the final equipment details, from layout to offset plans.

Before the final design is fixed, MacGregor performs a full-scale mock-up test to verify the performance of the lashing system. MacGregor considers elements such as the locations of handrails and other structures that might interfere with lashing equipment. When everything is designed, tested, manufactured and approved, all relevant documentation is made available in the cargo securing manual, which is needed on board for the vessel's maiden voyage.