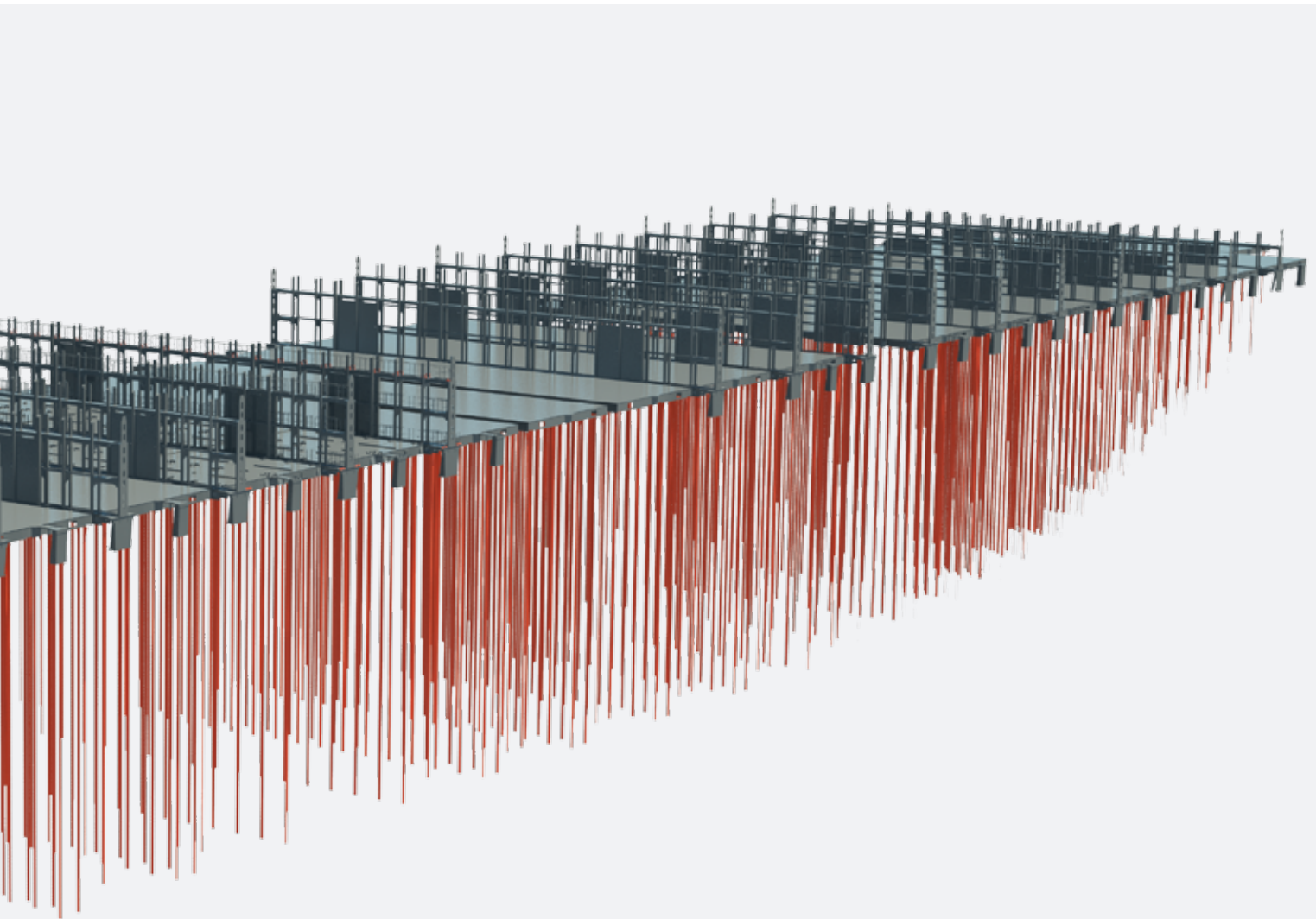


Before you commit to a ship, here is
how to maximise its earning potential



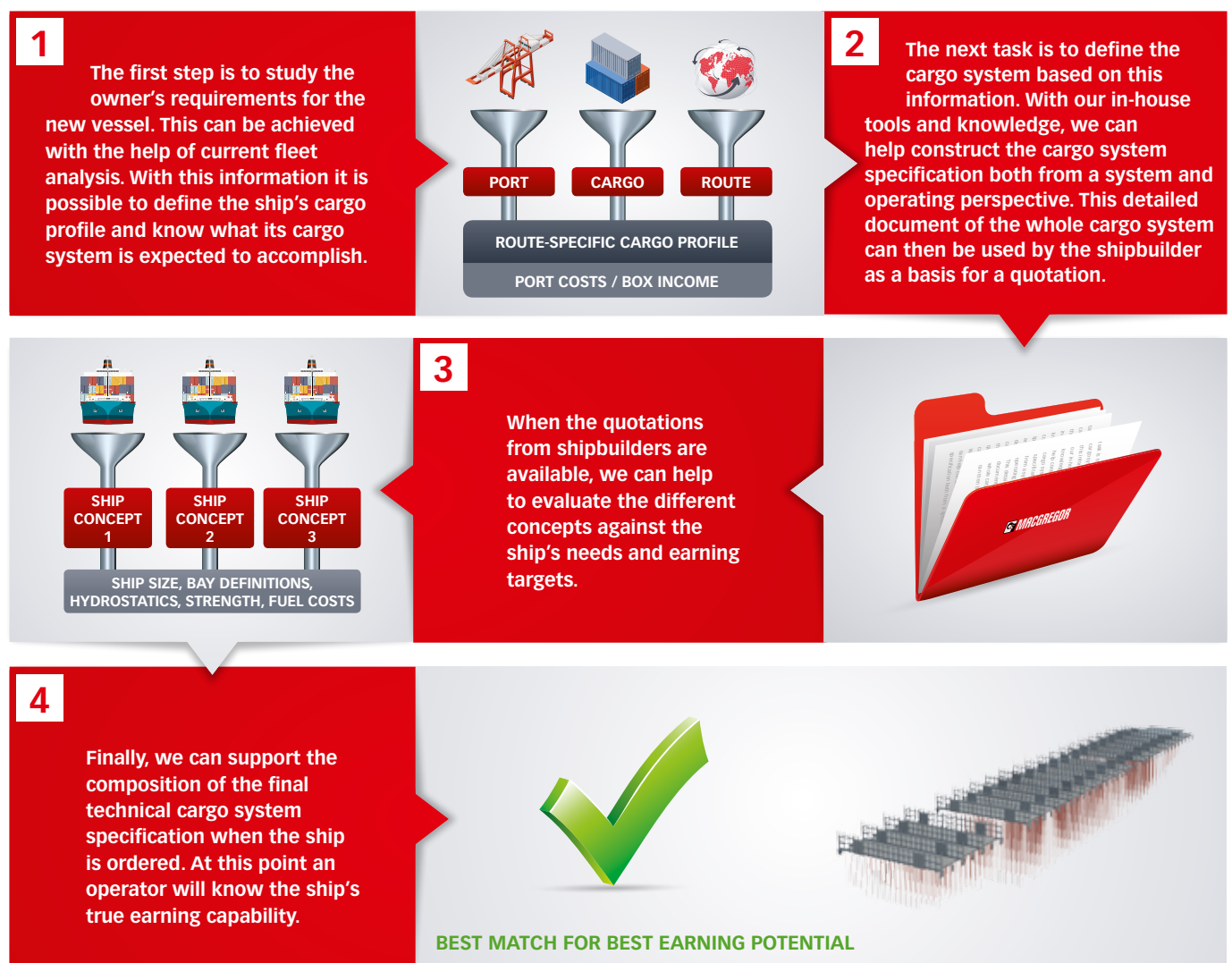
CARGO SYSTEM PRE-ORDER PRODUCTIVITY EVALUATION FOR CONTAINER SHIPS

Would you like to know what a newbuild will really be able to carry a year ahead of delivery?

With the right design parameters for a vessel and its cargo handling system, MacGregor can maximise the amount of cargo carried in relation to deadweight tonnage. The distribution of heavy and light containers, and subsequently total cargo weight, should therefore be one of the main factors when considering a new ship.

We believe that defining the cargo profile* should be the cornerstone and starting point for the ship design process and its container stowage arrangement. We set our minds to this challenge because we understand the whole cargo system.

This is what we can do before a new ship order is placed:



* MacGregor defines cargo profile as the distribution of containers on board a ship in terms of container sizes and container weights, operating on a particular route.

1. Fleet analysis - newbuildings

Current fleet analysis

A good starting point is an analysis of the fleet's current cargo profile, the routes it serves and the distribution – in terms of size and weight – of the containers it carries. For this analysis the fleet's existing Baplie files, which contain vessel stowage plans, are useful.

Definition of the newbuild's specific requirements

The newbuild's specific requirements need to be defined. MacGregor will need to know what routes it is intended to serve and the profile of the cargo that

it will carry. It is also possible to determine the type of cargo that will deliver the best earnings and how the cargo system can support the ability to carry this cargo.

Earning evaluation

The cargo system needs to be evaluated against the ship's business profile and cost structures. We can determine which of our concepts will deliver the best earning potential for your vessel and suggest the optimal corresponding cargo system design and hardware. This is known as the Individual Earning Report (TIEReport 1.0).

2. Inquiry specification - our full support

System requirements

The definitive requirements for the cargo system are specified at this stage. These include, for example, container stack weights and heights, payload (number of TEUs) and metacentric height (GM). The nominal capacity and the actual cargo-specific capacity per container weight and size can be a part of this phase.

Process requirements

This specification defines in detail how the development of the newbuild's cargo system should be managed. It specifies the design of the whole cargo system as a single entity, with one accountable supplier from definition, through the design process, to the delivery of the hardware and software, and the verification of the various systems by, for example, mock-up tests.

3. Two-fold evaluation of a ship's technical quotations

Evaluation of the investment profile with alternative quotations

We produce the Individual Lifecycle Earning Report (TIEReport 2.0) to demonstrate and compare the differences in earning abilities of the various cargo system specifications.

Evaluation of the ship's structures

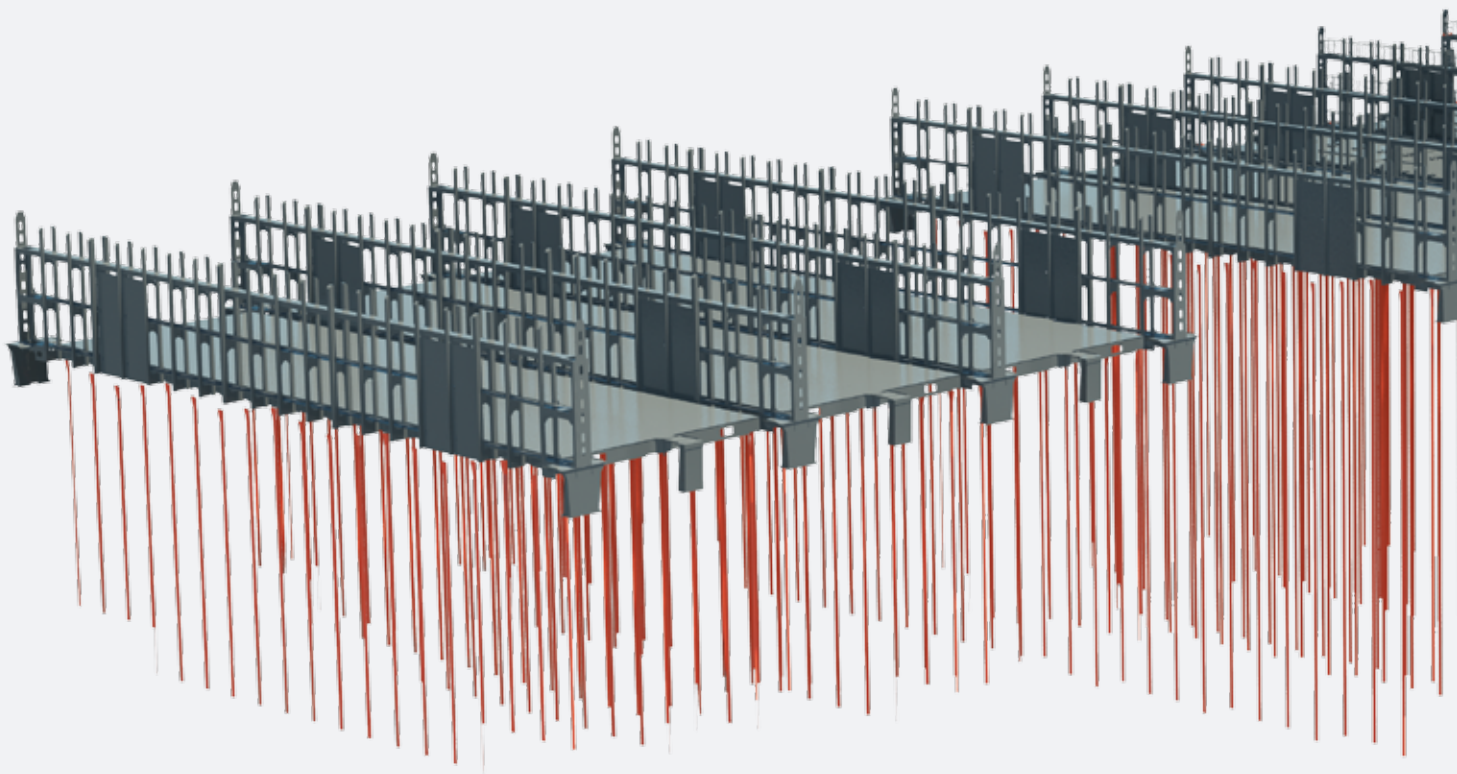
The purpose of this evaluation is to verify, in cooperation with the shipyard, that the ship's hull can carry the requested cargo profile from a strength and stability perspective and to suggest any necessary hull strengthening or modifications.

4. Final cargo system technical specification

This stage verifies the initial specification request taking into account subsequent modifications and

updates. It is the final order specification for the cargo system.

The efficiency of a container ship's cargo system has an immediate effect on the ship's earning potential and on the return of investment throughout the ship's lifetime. It makes good economic sense to invest in a system that provides a competitive edge and takes full advantage of a new or existing ship's earning potential from day one.



Lloyd's Register Quality Assurance certifies that the Quality Management System for Cargotec Marine is ISO 9001:2008 compliant.

MacGregor is the world's leading brand of engineering solutions and services for handling marine cargoes and offshore loads. MacGregor products serve the maritime transportation, offshore and naval logistics markets, in ports and terminals as well as on board ships. Our cargo flow solutions integrate cargo access, stowage, care and handling functions to suit a particular ship's cargo profile. This benefits its productivity, environmental impact and profitable service lifetime. MacGregor is part of Cargotec. Cargotec's class B shares are quoted on NASDAQ OMX Helsinki.

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