

Getting the best start for your optimised cargo system

A unique new approach to cargo system delivery service ensures that owners will reap maximum benefits from their optimised MacGregor cargo systems from day one, and throughout a vessel's working life

The efficiency of a container ship's cargo system has a direct effect on the vessel's earning potential and the return on investment throughout its lifetime.

Recognising this, MacGregor is developing a new comprehensive delivery services package that will break new ground by focusing on preparing a new ship and its personnel to maximise the profitability of its cargo system.

MacGregor's new approach to cargo system delivery covers a more thorough understanding of the cargo system so that it performs at its full potential from day one



A cargo system's efficiency has two sources: its technical characteristics, and the capabilities of its operators, both during the vessel's early voyages and later on.

"MacGregor is a market leader in designing and delivering optimised cargo systems," says **Henri Paukku**, Project Manager, MacGregor Customer Solutions. "These are based on analysis of the owner's commercial patterns, routes and cargo profiles. Involving us at an early stage of a newbuild project ensures that the owner ultimately takes delivery of a vessel with the best possible cargo system."

MacGregor's experience has shown that more can be done at a human level to ensure that these optimised cargo systems perform at their full potential. "It is essential that a ship's crew and relevant shore-based staff fully understand the features of the cargo system and how to make the most of its operational benefits," Mr Paukku says. "We have been focusing on how best to work up the cargo system in full readiness for a vessel's early voyages".

MacGregor identifies a ship's transition from a shipowner's newbuilding team to its operational team as the natural point to deliver a smooth transfer of knowledge and to introduce specific information needed for efficient cargo system operation.

"After the cargo system has been installed, checked, adjusted and commissioned according to normal MacGregor procedures, including basic training, we are now preparing a 'richer' delivery services package," he explains. "We have introduced an entirely new industry approach: embracing all aspects of the cargo system with the specific goal of preparing the ship and its personnel to maximise the profitability of the cargo system". The team involved will include commissioning engineers, taking care

that the system is ready as specified, an experienced master mariner, and experts in lashing, hatch covers and lashing bridge mechanics.

A number of distinct elements will lead to a new vessel and its crew working efficiently and in harmony right from the start of commercial operations.

Lashing gear distribution service: This takes place at the shipyard. It ensures that the various types of lashing equipment are distributed to the correct places on board, so that they will be easy to access when the vessel moves to its first loading port. MacGregor has also designed its lashing systems to cope with the many different lengths of turnbuckle/lashing bar combinations required. There can be as many as fifty different lengths; a situation with great potential for mistakes and lost time. MacGregor has addressed this problem by – wherever possible – making lashing bars to a

A guiding principle for MacGregor's ongoing cargo system input is to make the process as easy as possible for the customer



Crew training will be more hands-on and should be repeated each time there is a crew change

standard length, while providing turnbuckles of different lengths. The turnbuckles are 'fixed' to the appropriate structures, so that only the lashing bars can be removed and inserted easily, ensuring that the designed lengths are maintained.

Training crew and shore-based staff:

Traditionally, crew training takes place when all MacGregor equipment has been installed on board, and before the ship is delivered. It includes the correct use of lashing equipment, and also covers wear-parts and the technical properties of the fixed structures.

"In addition to this, our new approach will contain a more thorough understanding of the cargo securing manual, covering not only the equipment but the functioning of the whole cargo securing system including safety aspects," says Mr Paukku. "Safety and inspection issues should be handled in depth with the ship's master and first mate, while training for the other staff will be more hands-on. The training should be repeated each time there is a crew change and, in cases where there are a series of ships, it should be repeated for each vessel."

It is also important to provide appropriate ship-specific training for the shipowner's shore-based personnel and port stevedores. MacGregor believes the optimum time for this is one or two months before the ship's delivery, and again when the need emerges due to factors such as organisational changes.

System compatibility check: This important element involves discussing the maximised loading capacity with the relevant shipping company personnel.

MacGregor will explain how it has calculated the conditions for the vessel's maximised capacity to make sure that the ship's cargo planning, operations planning and loading personnel agree with these calculations. Another vital function of this check is to ensure there are no discrepancies in systems, loading computers, IT interfaces or procedures that would prevent the vessel

from achieving its loading capacity when compiling loading plans.

"All the MacGregor systems must be compatible with the customer's other cargo planning systems," he notes. "We will check whether there are gaps in the load planning capability where we can be of assistance. We must find solutions where there are discrepancies. We

should make sure that the entire cargo planning and loading process is in line with the cargo system design. This is vital in order to safely achieve the maximum cargo carrying capability."

Onboard guidance: Following this comprehensive training and supported by optimised, de-bugged planning systems, ship- and shore-based personnel will be in a good position to deal with a vessel's initial cargo calls. Even so, MacGregor believes that direct, face-to-face help can be very valuable at this point.

“It is essential that ship's personnel and relevant shore-based staff fully understand the features of the cargo system and how to make the most of its operational benefits”

Henri Paukku

"Our aim is to support all this preliminary work by providing a MacGregor cargo system expert to help and offer practical advice during the first port calls, and also later if it should be needed," says Mr Paukku.

System development based on feedback

With cargo operations on this scale, there is always the possibility of a gap between theoretical and actual performance, even after the most thorough planning and preparation. If requested, MacGregor can gather and analyse the ship's sailing condition data. "Using this data in combination with non-digital information from personnel on board, we can verify the actual loading capacity against the designed capacity; suggesting improvements and offering guidance designed to enhance the cargo system usage."

A guiding principle for MacGregor's ongoing cargo system input is to make the process as easy as possible for the customer. "We want to see how things are done on board to identify the most convenient timings for activities such as cargo system-related checks and information gathering. We want to facilitate hands-on, user-to-user instructions about how the system is used and applied.

"We see our input as a long-term commitment. We offer spare parts packages and guidance, ideally in combination with MacGregor Onboard Care agreements that can reduce unexpected maintenance costs. If a vessel's trading pattern changes, we want to be there to help it continue to deliver maximised returns on investment." ■

Have your say on enhanced delivery services: productivitycare.css@macgregor.com

We value your feedback for developing our products and services. MacGregor would appreciate your thoughts

on the topics covered in this article. Do you believe that with well thought-out delivery services your ship would have been up and

running quicker? What else can MacGregor do to help maximise your ship's earning potential? Have your say.