

Marine Selfunloaders

Cement handling system



TECHNICAL INFORMATION

*Kiyomi Maru
Shin Bongo Maru*

MacGregor cement handling system

Two 870 dwt cement carriers, *Kiyomi Maru* and *Shin Bongo Maru*, feature a well-proven and dust-free MacGregor self-unloading and loading dry bulk handling system, which has been designed for the efficient transportation of cement in Japan

In 2009, Taiheiyo Engineering Corporation in Japan, signed a contract for MacGregor cement handling systems for two new 870 dwt bulk carriers, *Kiyomi Maru* and *Shin Bongo Maru*. The vessels were built at Hongawara Shipbuilding Co in Japan, which delivered *Kiyomi Maru* in February 2011, and the second vessel, *Shin Bongo Maru*, was taken into operation two months later.

Each ship has a cement handling system designed for mechanical loading at a rated capacity of 400t/h, and a 200t/h pneumatic discharge capacity.

Both vessels are designed for coastal cement distribution between ports in the southern part of Japan.

System description

The installed cement handling systems are designed for maximum performance and flexibility for a variety of different port loading and unloading arrangements, including shore-based silos or directly into tank trucks.

The MacGregor equipment supplied includes:

- vertical screw conveyor
- horizontal screw conveyors
- duplex blow pump system
- aeration panels

Horizontal screw conveyors are used for cement distribution on deck during both loading and unloading operations.

For reclaiming cement, aeration panels are used to fluidise material in the cargo holds and the vertical screw conveyor elevates the cargo from the holds to deck level.

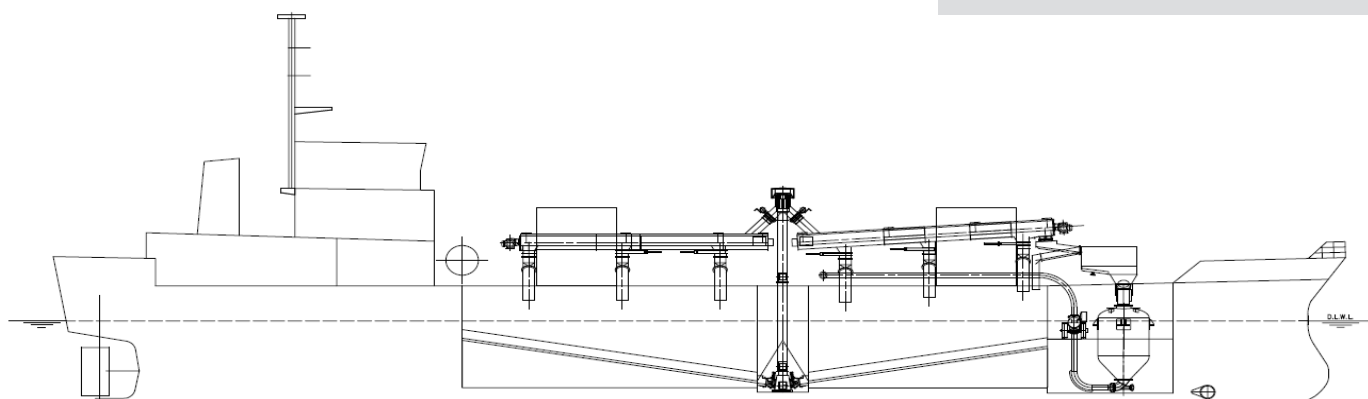
A duplex blow pump system conveys the cement to shore in pipelines at an optimised rate.

Vessel dimensions

Length o.a.	55.14m
Breadth max.	10.2m
Depth to main deck	5.5m
Draft	3.75m
Deadweight	870 dwt

System data

Mechanical loading capacity	400t/h
Pneumatic discharge capacity	200t/h



Design principle of the cement handling systems installed on *Kiyomi Maru* and *Shin Bongo Maru*

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MacGregor is the global market-leading brand in marine cargo handling and offshore load-handling solutions. Customer-driven MacGregor engineering and service solutions for the maritime transportation industry and the offshore load-handling and naval logistics markets are used onboard merchant ships, offshore support vessels, and in ports and terminals.

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