

Marine Selfunloaders

Bulk handling system



TECHNICAL INFORMATION

Kakusho Maru

MacGregor bulk handling system

Selfloading/unloading equipment for fly ash and calcium carbonate has been installed on the 4,500 dwt newbuilding, *Kakusho Maru*

In September 2006, Cargotec received a contract for the supply of a MacGregor selfloading/unloading fly ash and calcium carbonate cargo-handling system designed to be installed onboard the 4,500 dwt newbuilding, *Kakusho Maru*. Installation was carried out at Miura Shipbuilding Co. in Japan and commissioning was finalised in late 2007.

The system is designed for mechanical loading and pneumatic unloading and it has an unloading capacity of 500t/h. The vessel is used to carry fly ash and calcium carbonate between cement factories and power plants.

System description

For reclaiming the cargo, aeration panels are used to fluidise it in the holds. A vertical screw conveyor in each hold elevates the cargo above the deck. From here, two deck-mounted horizontal screw conveyors convey the cargo to midship and discharge it into a buffer hopper.

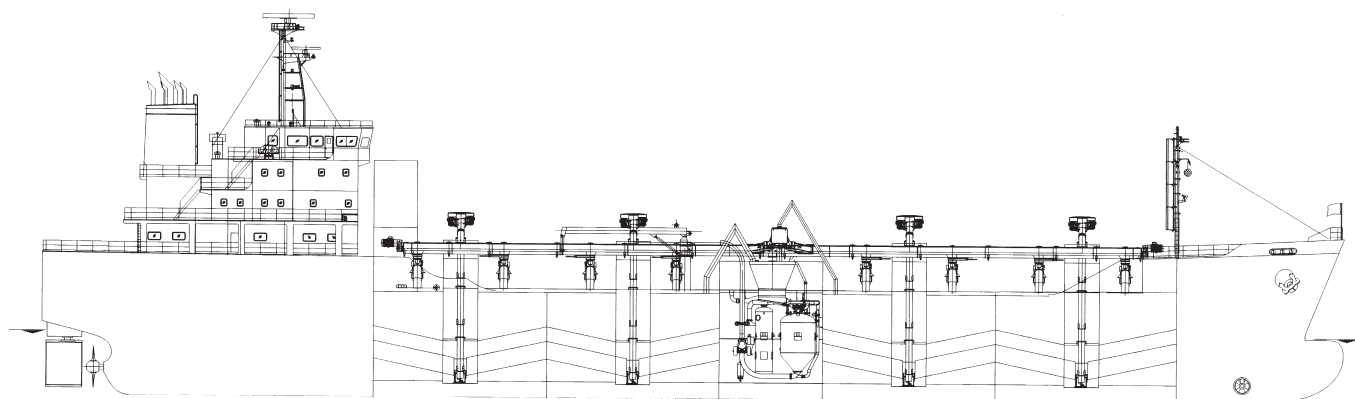
Cargo from the hopper is fed into a duplex blow pump system and conveyed through a pipeline to a shore silo.

Vessel dimensions

Length overall	105.0m
Width	17.5m
Depth to main deck	8.55m
Draft	5.2m
Dead weight	4,500 dwt

System data

Rated loading capacity, mechanically	1,000t/h
Rated unloading capacity, pneumatically	500t/h



Design principle of the self-unloading system

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

Cargotec improves the efficiency of cargo flows on land and at sea – wherever cargo is on the move. Cargotec's daughter brands Hiab, Kalmar and MacGregor are recognised leaders in cargo and load handling solutions around the world.

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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