

Marine Selfunloaders

# Deck conveyor system



TECHNICAL INFORMATION

# *Gem of Ennore*

# MacGregor deck conveyor system

The 73,800 dwt vessel, *Gem of Ennore*, features a self-unloading system from Cargotec that includes seven deck cranes and stationary hoppers for the efficient discharge of coal

In 2001, the 73,800 dwt vessel, *Gem of Ennore*, was converted into a self-unloading ship with deck cranes and stationary hoppers. It is owned by West Asia Maritime Ltd in India, and is primarily intended to carry coal along the Indian east coast. The conversion was carried out at Chengxi Shipyard in China.

## System description

The vessel's cargo holds are unloaded by the deck cranes, which discharge the cargo into seven stationary hoppers located on main deck. Each hopper has a belt feeder that feeds the material, at a constant rate, to a longitudinal belt conveyor.

The longitudinal conveyor inclines and transports the material to a cross

conveyor. From the cross conveyor the material is transferred onto a slewable and hoistable boom conveyor for further transport to the existing receiving conveyor arrangement ashore.

Despite the fact that the boom conveyor is located on the starboard side and in direct connection with the cross conveyor, the slewing range of the boom conveyor is 240°. This allows the boom to reach and discharge to the port side as well.

Operation of all belt feeders and belt conveyors is done remotely from the control room, which is located between cargo holds no. 1 and 2. Each conveyor can also be operated from a local position for maintenance purposes.

## Vessel dimensions

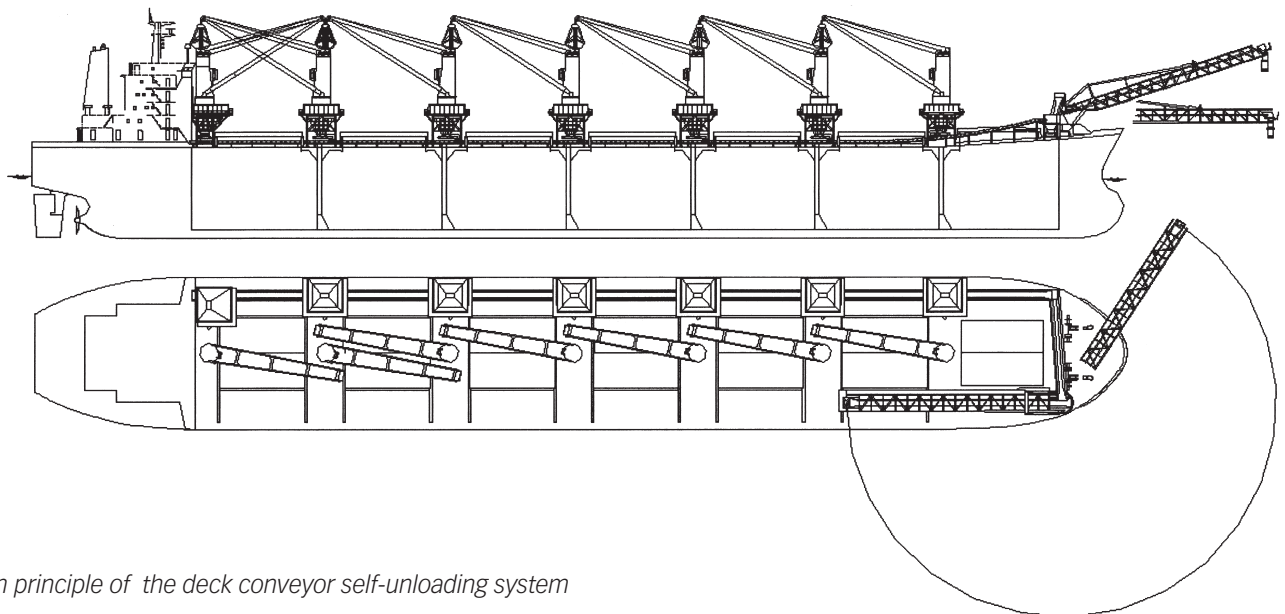
Length, overall	255m
Length between p.p.	217m
Breadth	32.2m
Depth	19.15m
Draft	12.40m
Deadweight	73,800 dwt

## System data

Discharge capacity	4,000 t/h or 4,000 m <sup>3</sup> /h
Cargo	coal

## Boom data

Length of boom conveyor	47.3m
Slewing range	240 degrees



Design principle of the deck conveyor self-unloading system

90000006-AUG2011



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

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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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