

## Marine Selfunloaders

# C-conveyor elevating system

MacGregor C-conveyor elevating system is designed for installation on gravity-belt self-unloading vessels and intended for elevating bulk materials from bottom of the cargo holds to main deck

The first MacGregor C-conveyor elevating system for self-unloading vessels was delivered by Cargotec in 1998. Since then, the C-conveyor has been installed on a number of vessels varying in size from 4,500 dwt to 135,000 dwt.

Many different material can be handled including, gypsum rock, crossed marble, iron ore, coal and other coarse bulk materials with a lump size up to 300mm.

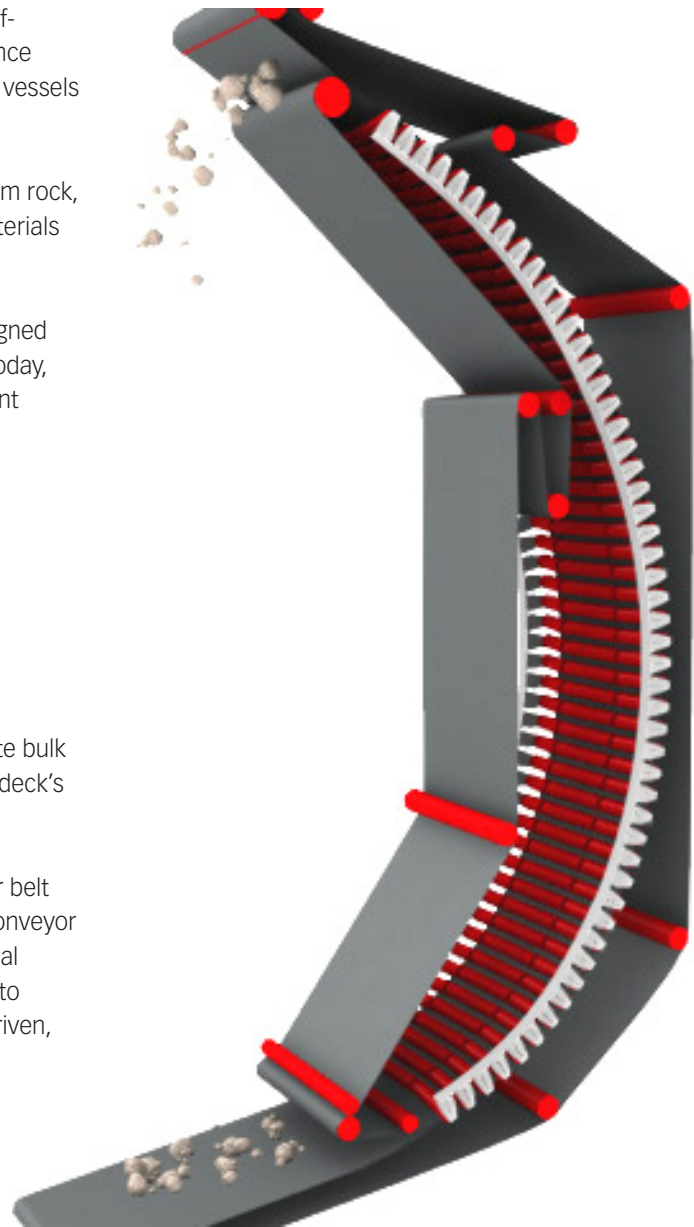
The discharge rate is flexible and the C-conveyor is designed in accordance with the customer's requirements. Until today, Cargotec has delivered C-conveyor systems with different discharge rates depending on the material handled:

- iron ore at a discharge rate of 6,000t/h
- aggregates at a discharge rate of 3,000t/h
- coal at a discharge rate of 3,000t/h
- gypsum rock at a discharge rate of 3,000t/h

### System description

The MacGregor C-conveyor system is designed to elevate bulk material from the bottom of cargo holds up to the main deck's hoistable and slewable boom conveyor.

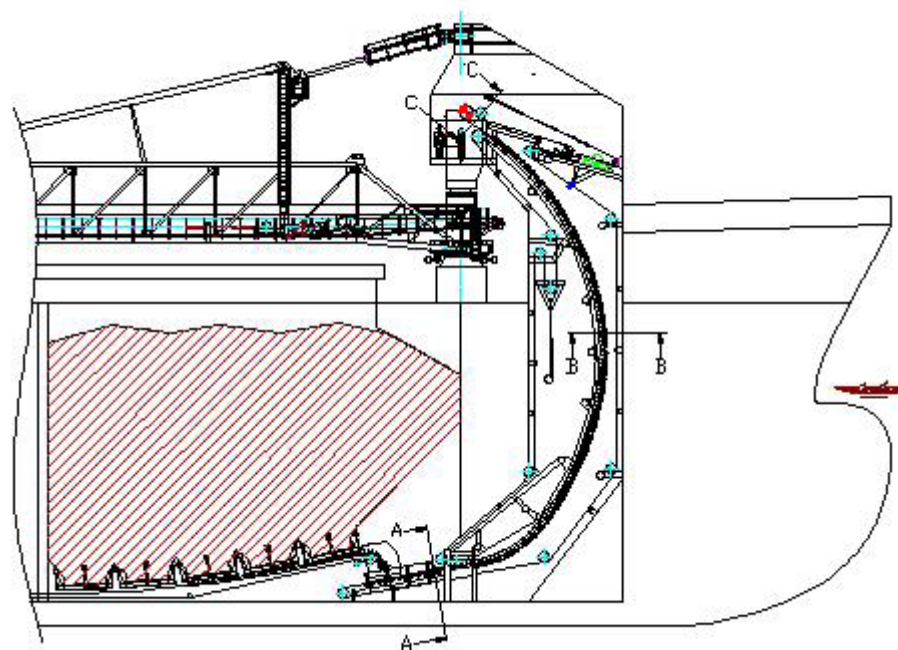
Bulk material is sandwiched between an inner and outer belt that runs on idlers fitted on the outside of a C-shaped conveyor structure. Because these belts are under tension, material remains between them. The belt edges also form a seal to avoid spillage and dust creation. Only the outer belt is driven, with the inner belt running parallel due to friction.



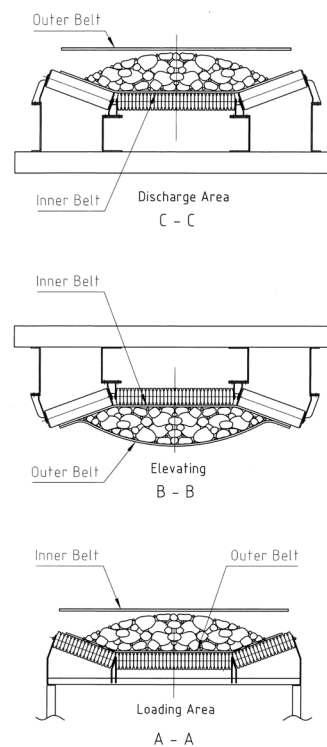
## MacGregor C-conveyor elevating system for gravity vessels



Details of the C-conveyor elevating system



Design principle of the C-conveyor and full flow gates



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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