

Marine Selfunloaders

# Deck conveyor system



TECHNICAL INFORMATION

*Bakra*

# MacGregor deck conveyor system

The 70,000 dwt transfer vessel, *Bakra*, features a deck-mounted conveyor system from Cargotec, and is intended for transloading cargo offshore from capesize vessels

In 1999, the 70,000 dwt bulk carrier, *Bakra*, was converted into a transfer vessel with cranes and a deck-mounted conveyor system. The conversion was carried out at Götaverken Cityvarvet, Gothenburg, Sweden, for owner Torvald Klaveness & Co AS, Norway.

The conveyor system is mainly designed to handle iron ore pellets and iron ore rubble, but is also suitable for aggregates and coal.

## System description

*Bakra* is equipped with four cranes mounted on eccentric arms to transfer cargo offshore from capesize vessels into its cargo holds.

The cargo is then discharged from *Bakra* using its cranes, which load material into two large deck hoppers. From the

deck hoppers, material is conveyed on the longitudinal conveyor, cross conveyor and boom conveyor and then transferred to the shore-receiving conveyors. The discharge operation is supervised and controlled from a control cabin located in the boom conveyor's supporting A-frame, which provides a good overall view of the conveyor system and jetty.

The two large hoppers can be lifted from their position either for sea stowage or if the hoppers interfere with the ship loaders during loading.

The boom structure contains one inner fixed conveyor and one outer reversible telescopic conveyor either for easy positioning to the shore hopper or maximum spreading of the material when discharging directly to the stockpile.

## Vessel dimensions

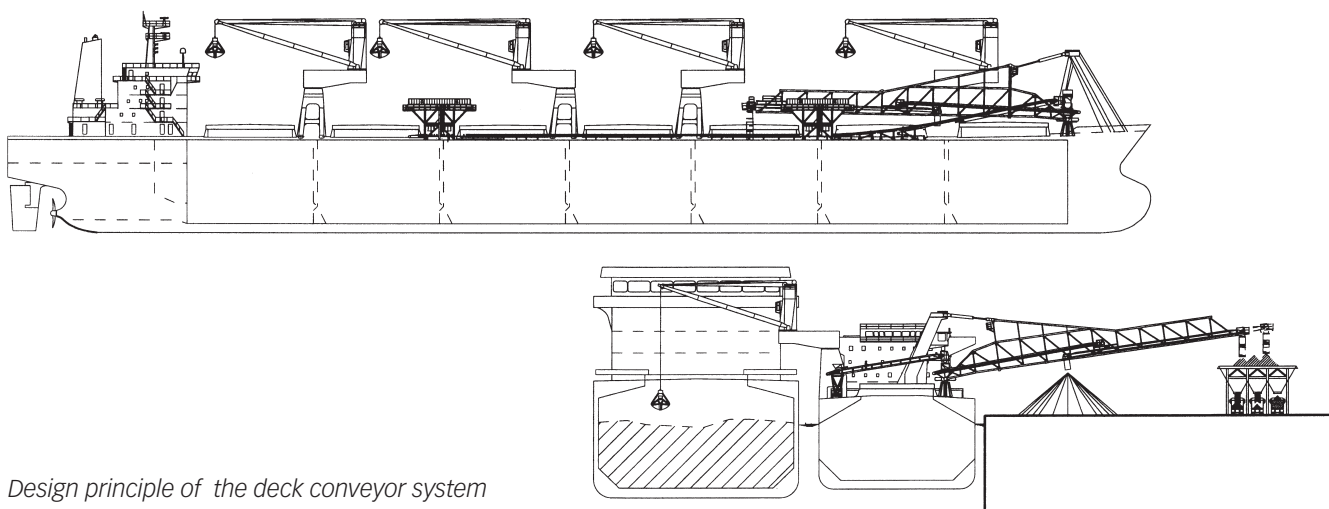
Length, overall	225.0m
Length between p.p.	215.0m
Breadth, moulded	32.20m
Depth, moulded	18.50m
Draft	12.40m
Deadweight	70,000 dwt

## System data

Capacity	2,500t/h or 1,1515 m <sup>3</sup> /h
Cargo	iron ore pellets, coal, sand, etc.

## Boom data

Length of boom conveyor	66.5m
Telescopic shute length	5.5m
Maximum hoisting range	18 degrees
Approx. slewing range	180 degrees



Design principle of the deck conveyor system

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