



850 m³ split-type hopper barge

Principal Dimensions

Length overall	58.55	m
Length between perpendiculars	55.79	m
Breadth moulded	12.00	m
Depth moulded	4.55	m
Draught at Summer Mark	3.80	m
Draught at reduced freeboard	4.10	m

Capacities

Hopper capacity	850	m ³
Hopper load	1 530	ton
Deadweight "all told"	1 665	ton

Machinery

2 main engines, output each	approx.	485	kW
2 azimuthing thrusters, each with a diameter of	approx.	1 300	mm
2 auxiliary generator sets, output each	approx.	107	kVA
1 emergency generator set	approx.	47	kVA

Performance

Trial speed at 100% MCR	9.2	kn
Endurance	14	days

General

Main characteristics are:

- Capable of transporting sand, silt, clay, gravel and stone in the hopper compartment.
- Capable to dump the spoil to the seabed by means of longitudinally splitting of the vessel.
- Splitting of the vessel is operated by two hydraulic cylinders, one forward and one aft of the hopper, capable to open the vessel remotely controlled from the wheelhouse.
- The hopper has a coaming and is open at the top.
- Remote control of the propulsion installation from the wheelhouse.
- Accommodation space in a deckhouse at aft deck, suitable to accommodate twelve persons, divided into six Officers and six Crew.
- The fresh cooling water system is based on the same principles as "keel cooling" viz. by means of box coolers, consisting of removable tube-bundles in contact with seawater for transfer of heat, fitted in boxes inside the vessel's hull.
- Capable to undertake international voyages in ballast conditions.

VER scope of work

On behalf of a dredging contractor, VER developed a design package to enable the contractor to tender for a state-of-the-art split-type hopper barge.

The design package includes a General Arrangement Plan, Midship Section, weight calculation, stability, calculation of vessel's longitudinal strength and a cost price estimate.

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