TRAILING SUCTION HOPPER DREDGER 650
Damen TSHD Series

GENERAL
Basic functions
Trailing suction dredging
Classification society
Bureau Veritas
Notation
1, #Hull, #Mach, Hopper Dredger, unrestricted navigation – dredging within 15 miles from shore or within 20 miles from port, Dredging over 15 miles from shore with Hs ≤ 2.5m #AUT-UMS, INWATERSURVEY, PROTECTED FO TANKS, GREEN PASSPORT

DIMENSIONS
Length o.a.(ex bow coupling) 56.85 m
Length b.p.p. 55.60 m
Beam moulded 12.00 m
Depth moulded 4.00 m
Draught (summer) 3.18 m
Draught (dredging) 3.50 m
Deadweight 1130 t
Hopper volume 650 m³

TANK CAPACITIES
Ballast water 82 m³
Fuel oil (service) 62 m³
Potable water (service) 59 m³
Sewage 23 m³

PERFORMANCES
Speed (dredging draught) 10 kn
Dredging depth 15 m
Rainbow distance 55 m (option)
Discharge distance 850 m (option)

PROPULSION SYSTEM
Propulsion power 2x 447 kW
Propellers 2x 1300 mm, FPP, azimuth in nozzle
Bow thruster 1x channel type, 245 kW

DREDGE SYSTEM
Trailing suction system 1x 400 mm trailing suction pipe
1x diesel driven dredge pump
1x adjustable overflow
Discharge system 2x rod actuated bottom doors
1x diesel driven jet water pump
2x jet water monitor

ELECTRICAL SYSTEM
Networks 400V/230V @ 50 Hz
Generator sets 2x 150 ekW
Emergency generator set 1x 49 ekW

DECK EQUIPMENT
Anchor mooring winch 1x electro hydraulic, with two warping heads
Capstans 2x electric, 2t pull
Deck crane 1x knuckle boom, 2.6t @ 8.7m

ACCOMMODATION
Crew 10 persons

NAUTICAL AND COMMUNICATION EQUIPMENT
Radar system 1x X-band
GMDSS Area A3
Camera system CCTV
Remote monitoring Damen Connected Ship

OPTIONS
The Damen TSHD series are of a modular design to enable customization of the vessel. Optional systems can be added or omitted to meet specific client requirements.
Main options comprise:
- Self-emptying system with bow coupling
- Light mixture overboard system with Non-radioactive density measurement
- Dredge Monitoring DDM5.0
- Position keeping DP-0 system with single joystick control
- Clamshell Grab crane 1x Diesel-hydraulic 8t at 11m with 2.5 m³ clamshell grab
Other options upon request

All information in this datasheet is intended for information only. Figures may vary depending on final configuration of the vessel.
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