

Trailing Suction Hopper Dredger



MAIN PARTICULARS

Year Built: -----2008-01-18
Navigation Area: -----Unlimited
Installed Power: -----12,330 kW
Gross Tonnage: -----6,044 t
Net Tonnage: -----1,813 t
Length Overall:-----113 m
Length Between Perpendiculars: ---106.4 m
Breadth: -----18.8 m
Depth:----- 8.1 m
Loaded Draft (Avg): -----6.0 m
Light Draft (Avg): -----3.5 m
Displacement (Loaded): -----12,500 t
Lightweight:----- 4,770 t
Speed (Transit): -----11.7 knots
Working Speed: -----2.5 knots
Endurance:----- 20 days
Complement:----- 28 persons (30 berths)

HOPPER & DREDGING SYSTEM

Hopper Capacity: -----5,000 m³
Payload: -----7,000 t
Max Dredging Depth:----- 26 m
Discharge Distance (Shore Pumping): 1,500 m Suction Pipe
Diameter: -----900 mm
Discharge Pipe Diameter:----- 800 mm

DREDGE PUMP SYSTEM

Quantity: -----2 units
Type: -----Single Volute Centrifugal
Model: -----VL 900-2300
Flow Rate: -----13,000 / 11,000 m³/h
Head:----- 4 / 8 bar
Rated Power: 1,900 kW × 2
Impeller Diameter: -----2,300 mm
Manufacturer: -----VOSTA LMG
Drive Engines: -----Daihatsu 6DKM-28(L) × 2 Fuel
Consumption: -----197 g/kWh Turbocharger: ABB TPS61E01

ELECTRICAL POWER

Main Generators: -----3 × Daihatsu 6DC-17
Output: -----550 kW @ 1,000 rpm
Voltage/Frequency: -----400 V / 50 Hz

Emergency Generator:

Engine:----- 6135AZD-1
Output: -----150 kVA @ 1,500 rpm AUXILIARY SYSTEMS
High Pressure Jet Water Pumps: 2 × Cummins KTA38-D(M)
Flow Rate: -----3,100 m³/h

PROPULSION

Main Engines: --2 × Daihatsu 8DKM-28(L) Rated Power: 2,500 kW × 2
Speed:----- 750 rpm
Fuel Consumption: -----203 g/kWh
Gearbox: ----Reduction gearbox with clutch Propellers: No.19A ducted
Ka-type, 4 blades Quantity: 2 (Port LH, Starboard RH)

BOW THRUSTER

Model: -----KT-55B1 × 1
Power:----- 440 kW
Thrust: -----68 kN
Propeller Diameter: -----1,300 mm
Speed:----- 448 rpm

STEERING GEAR

Type:----- Twin rudder
Rated Torque: -----200 kN·m
Hydraulic Pressure: -----15.3 MPa

AUXILIARY SYSTEMS

High Pressure Jet Water Pumps: 2 × Cummins KTA38-D(M)
Flow Rate: -----3,100 m³/h
Head: -----75 m

Deck Cranes:

11 t @ 18 m and 15 t @ 16 m (2 units)

Anchors:

3 × Spek Anchors, 3,540 kg each

OTHER EQUIPMENT

Oil Water Separator: -----15 ppm, 2 m³/h

Sewage Treatment Plant: -----30 persons, 2.24 m³/day

Air Compressors:----- 3 units, 31.5 m³/h

Refrigeration System: -----BOCK FX2 compressors, R404A refrigerant

