ELECTRIC CUTTER SUCTION DREDGER
ECSD650 – 18 M

PICTURE OF SIMILAR VESSEL

GENERAL
Type: ECSD650 – 18 m
Basic functions: Capital mining and maintenance dredging

DREDGING FEATURES
Max. dredging depth: 18 m
Swing width: 62.8 m (at max. dredging depth)
Max. mixture capacity: 7,000 m³/h

DREDGE INSTALLATION
Dredge pump type: BP6560MD
Diameter suction/discharge pipe: 650 mm
Cutter type: Crown model (with changeable pick points)
Cutter power: 700 kW
Cutter diameter: 2,100 mm

DRIVE INSTALLATION
Dredge pump motor: Electric motor
Power: 1,825 kW, 1,600 rpm
Auxiliary motor: Electric motor
Prime power rating: 1,120 kW, 1,600 rpm
Hydraulic installation: Driving cutter, winches and cylinders
Electrical installation: 690 / 230 / 400 V AC – 50 Hz and 24 V DC
Harbour generator set: 35 kVA, 230/400 V AC, 50 Hz
Jet water pump set: 230 kW, 1,200 m³/h, 5 bar

PRINCIPAL DIMENSIONS
Length o.a. incl. ladder: 61.70 m
Length over pontoons: 49.30 m
Beam: 10.50 m
Depth: 2.80 m
Draught: 1.65 m
Air draught: 8.40 m
Total weight: 550 ton

TANK CAPACITIES
Ballast / Void approx. (fore): 2x 33.80 m³
Ballast / Void approx. (aft): 2x 48.00 m³
Hydraulic oil main tank: 1x 3.50 m³
Hydraulic oil spud drop tanks: 2x 0.25 m³
Fresh water tank: 1x 3.30 m³
Grey water tank: 1x 3.30 m³
Sewage treatment tank: 1x 0.85 m³
Fuel tank harbour generator set: 1x 0.70 m³

DECK MACHINERY
Ladder hoisting: Hydraulic, 270 kN, 0-15 m/min
Side wire winches (2x): Hydraulic, 270 kN, 0-20 m/min
Spuds (2x): Ø 914 mm, length 24 m
Spud carriage positioning: Hydraulic cylinder, stroke 2 m
Jet water monitor: Hydraulic operated
Electric deck crane:

INSTRUMENTATION
Dredging depth indicator
Vacuum and pressure indication of dredge pump
Production measurement
Dredge visualization
Semi dredge automatization
Spud carriage position indicator

REMARKABLE FEATURES
Fully electric dredger with shore supply connection
Dismountable design which allows transport by road
Heavy duty robust design
Simultaneous operation of all functions possible
Spacious ergonomic designed control cabin and engine room
One operator can control the entire dredger from the control cabin
Operators cabin with air conditioning and heating
Large range of standard options are available to customize the CSD
Day accommodation with toilet and kitchen
Bureau Veritas Coastal classification

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DAMEN
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