

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 m ³ /h

DREDGE INSTALLATION

Dredge pump type	BP6560MD
Diameter suction/discharge pipe	650 mm
Spherical passage pump	300 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 m ³ /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 m ³
Ballast / Void approx. (aft)	2x 48.00 m ³
Hydraulic oil main tank	1x 3.50 m ³
Hydraulic oil spud drop tanks	2x 0.25 m ³
Fresh water tank	1x 3.30 m ³
Grey water tank	1x 3.30 m ³
Sewage treatment tank	1x 0.85 m ³
Fuel tank harbour generator set	1x 0.70 m ³

DECK MACHINERY

Ladder hoisting	Hydraulic winch, 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 hosting (2x)	Hydraulic cylinder, stroke 2 m
Spud carriage positioning	Hydraulic cylinder, stroke 6 m
Jet water monitor	Hydraulic operated
Electric deck crane	

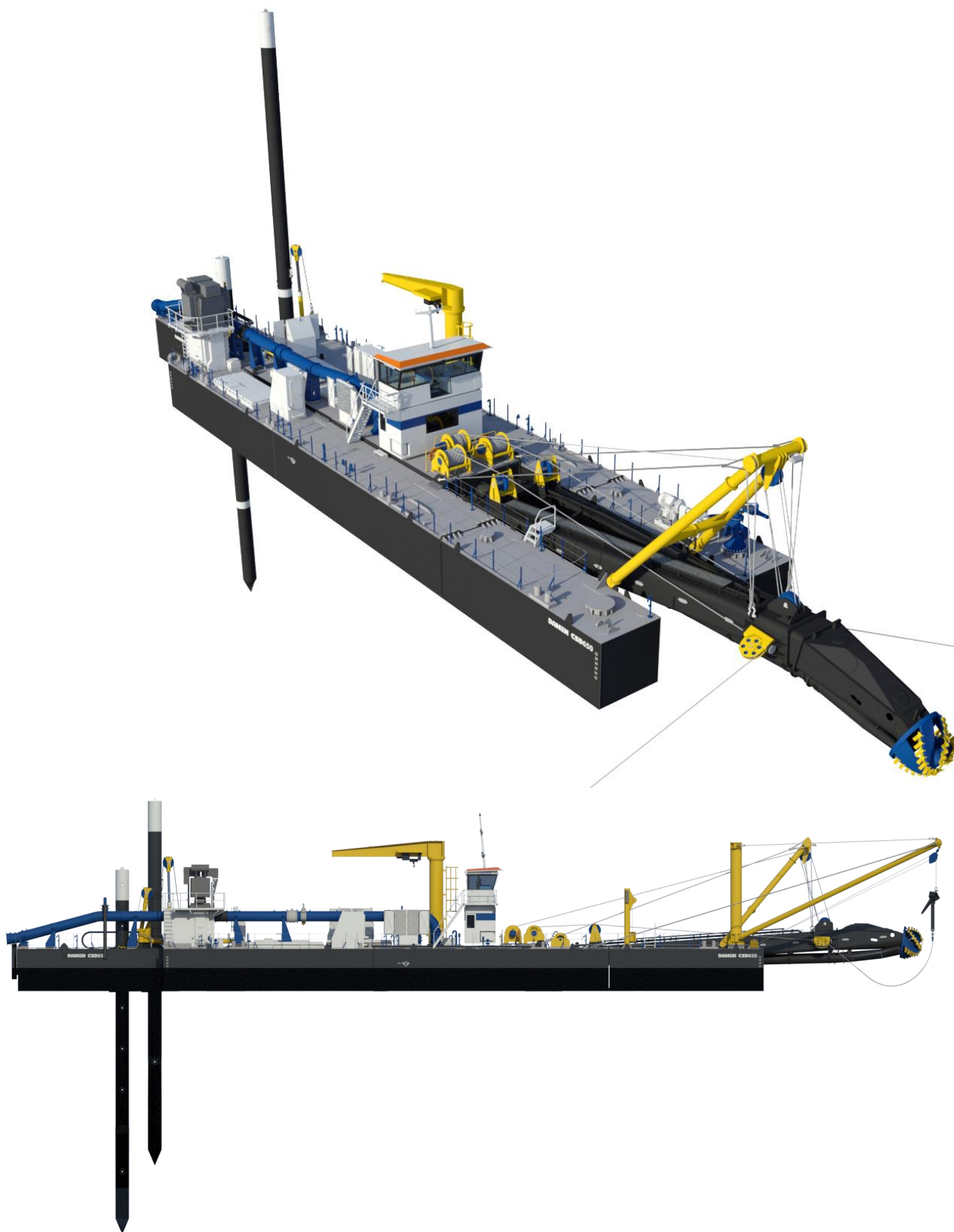
INSTRUMENTATION

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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