

CSD 450

Specifications

Main Particulars

Length overall	36 m
Length over deck	24 m
Breadth, molded	7,6 m
Depth main pontoon	2,5 m
Design draught	1,6 m
Dredging depth min/max	2/14 m
Suction pipe inner diameter	450 mm
Discharge pipe inner dia.	450 mm
Total weight	140 ton
Total installed power	850 kW

Dredging Components

Cutter head	VOSTA LMG TSC 04
Cutter power	108 kW
Dredge pump	VOSTA LMG450-1020
Dredge Pump Power	634 kW
Side winch	2 pcs
Pulling force max.	80 kN
Spud system	
Working and holding spud	

Deck Equipment

Deck crane	4 ton
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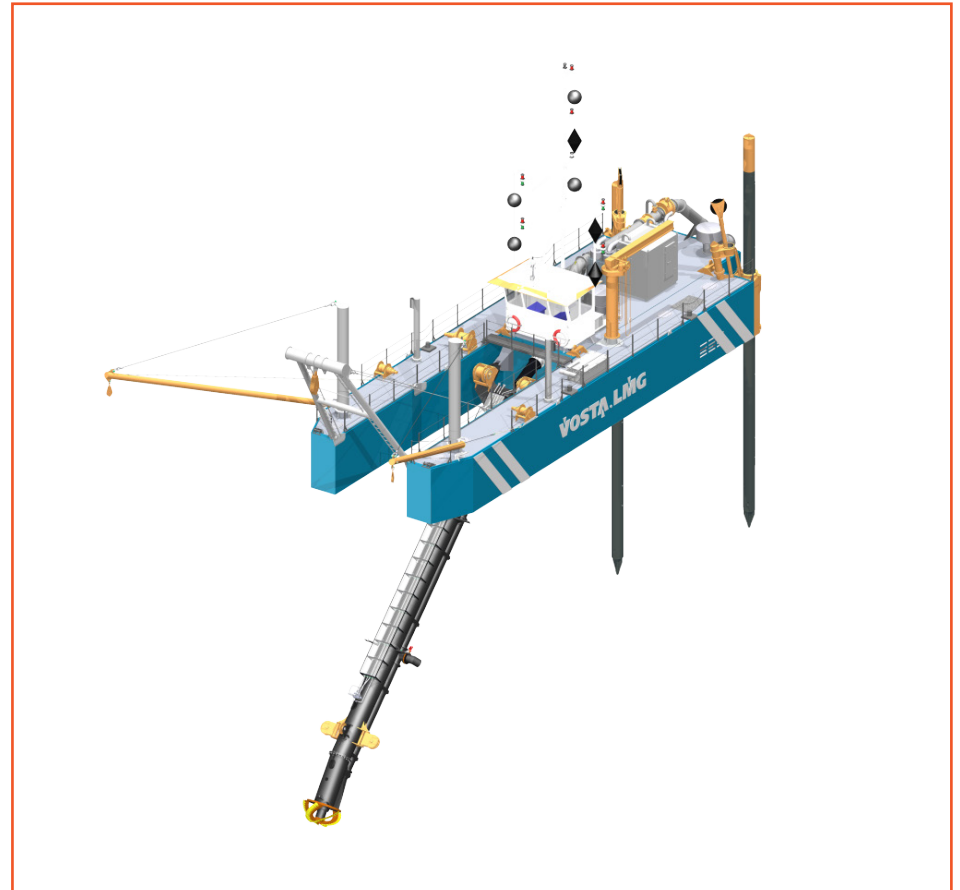
Electrical System

Main generator	(PF0,8) 24 ekW
Ship´s main voltage	400 V
Ship´s main frequency	50 Hz

Main Drives

Diesel engines	
Dredge pump engine	634 kW
Auxiliary engine	232 kW

The standard dismountable cutter dredger CSD 450 is well equipped to operate in a wide range of coastal zones with several materials up to compact sand and clay. It is specialized for maintenance and land reclamation work also in shallow water areas. The dredger is optimized for dredging compacted soils.



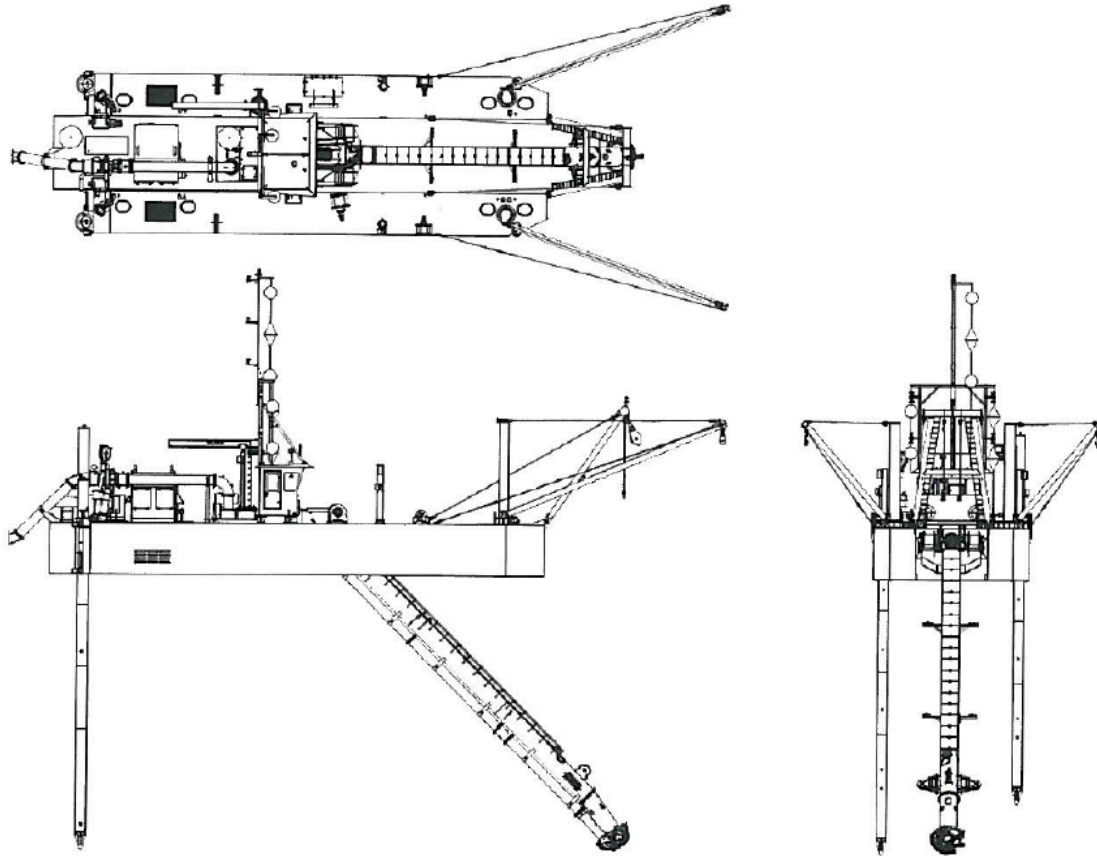
Options

Spud tilting system
Anchor Booms
Swivel bend
Dredge monitoring system
Production measuring system
Harbor set
Spud carrier
Mooring equipment
Propulsion system
Accommodation, 4 crew
Hydrophore
Lavatory
Classification inland waters
Classification coastal waters

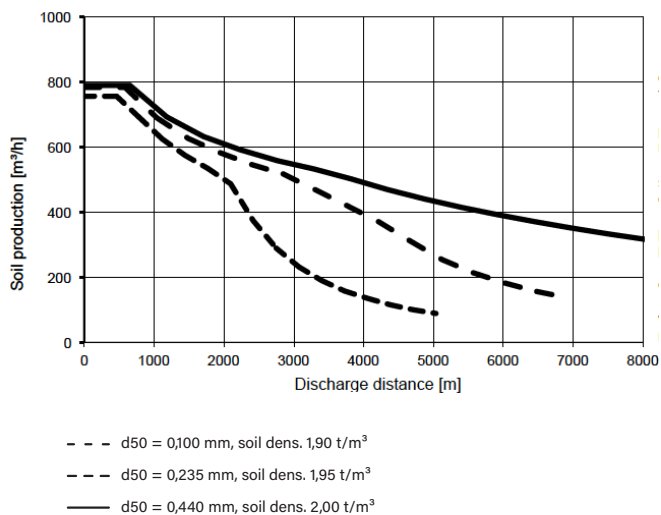
Dedicated functions*:

- Lowest price per cubic meter at a wide range of jobs
- Optimization of shallow water operation
- Minimization of vibration level
- Maximum of allover operation efficiency due to:
 - Optimization of anchor/spud maneuver
 - Operation with high efficient cutter head with special patented cutter teeth of highest wear resistance
 - Operation with high efficiency dredge pump with optimized suction performance
 - Operation with approved dredge control/monitoring system, automation of dredging process

*) to get all functions optional equipment required



Production Diagram CSD 450



Estimated dredge pump production diagram

Dredge pump type	VL 450-1020
Pump shaft power	634 kW
Nominal speed	640 rpm
Suction pipe diameter	450 mm
Discharge pipe diameter	450 mm
Pump elevation	0 m
Pipe elevation	4 m
Dredging depth	14 m
Water density	1025 kg/m³
Density solids	2650 kg/m³
Max. soil concentration	20 %

Remarks

- production curves for reference only
- free flowing sand conditions considered
- production limitation due to soil/cutterhead not considered