CSD 500

VOSTA LMG
DREDGING TECHNOLOGY

Specifications

The standard dismountable cutter dredger CSD 500 is well equipped to operate in a wide range of coastal zones with several materials up to compact sand clay. It is specialized for maintenance and land reclamation work also in shallow water areas. The dredger is optimized for dredging compact soils.

Main Particulars

Length overall	38 m
Length over deck	29 m
Breadth, molded	8,5 m
Depth main pontoon	2,75 m
Design draught	1,6 m
Dredging depth min/max	2 / 15 m
Suction pipe inner diameter	550 mm
Discharge pipe inner dia.	500 mm
Total weight	235 ton
Total installed power	1274 kW

Dredging Components

Cutter head	VOSTA LMG TSC 04
Cutter power	175 kW
Dredge pump	VOSTA LMG500-1350
Dredge Pump Power	954 kW
Side winch	2 pcs
Pulling force max.	100 kN
Spud system	
Working and holding spud	

Deck Equipment

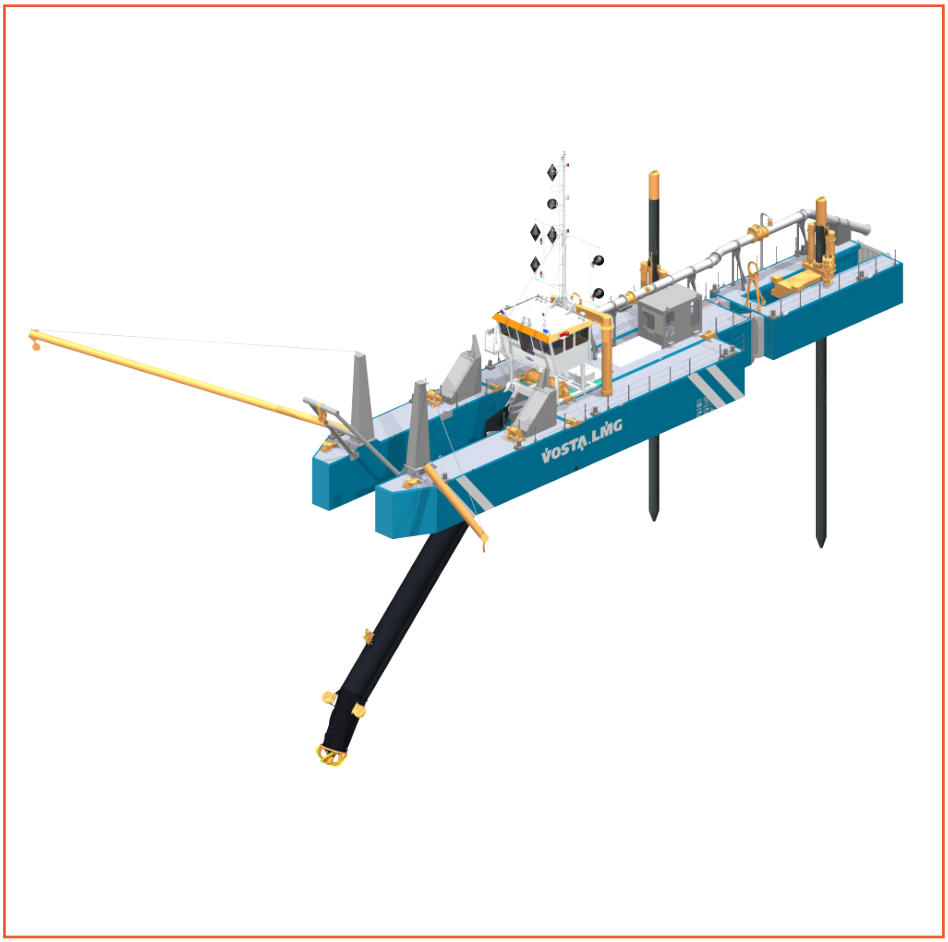
Deck crane	5 ton

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	954 kW
Auxiliary engine	320 kW



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

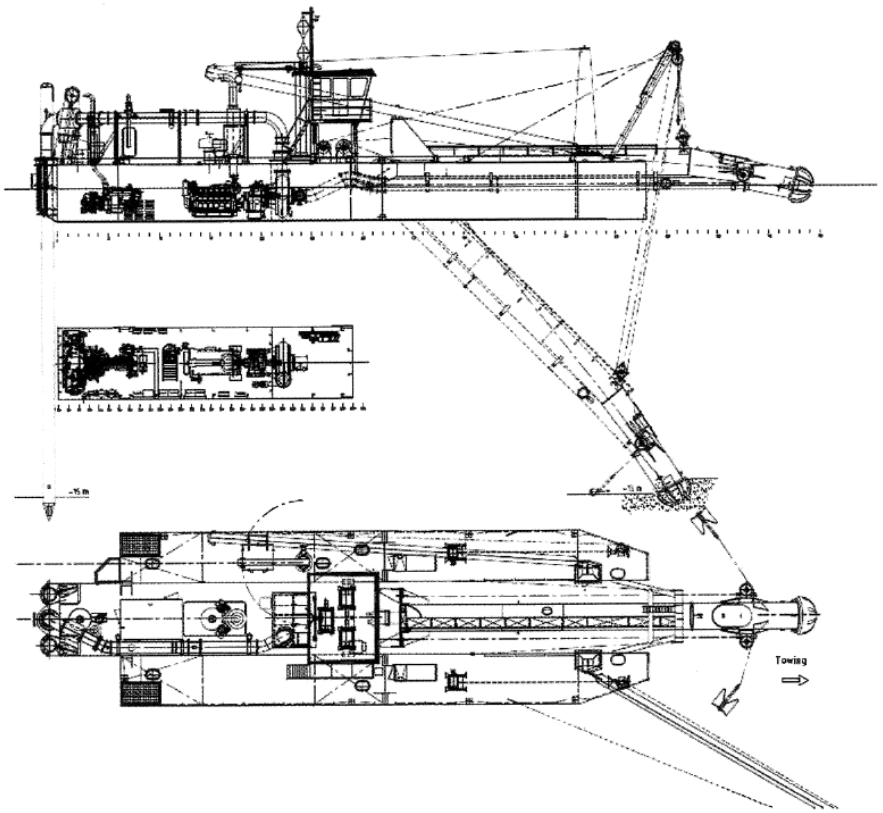
Optimization of shallow water operation

Minimization of vibration level

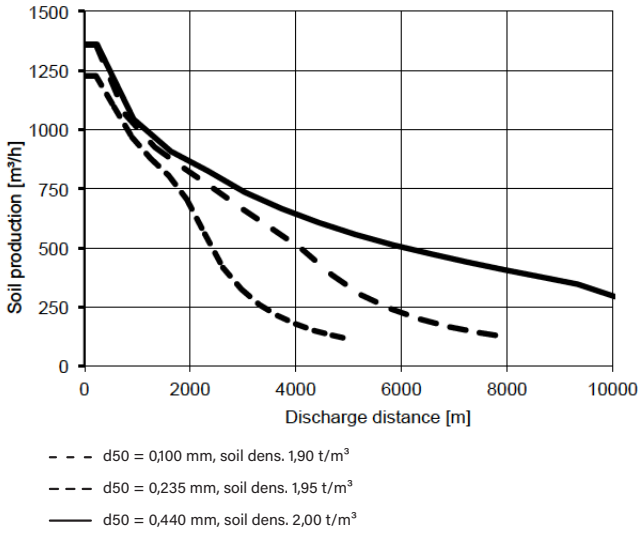
Maximum of allover operation efficiency due to:

- 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 500



Estimated dredge pump production diagram

Dredge pump type	VL 450-1020
Pump shaft power	616 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	10 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