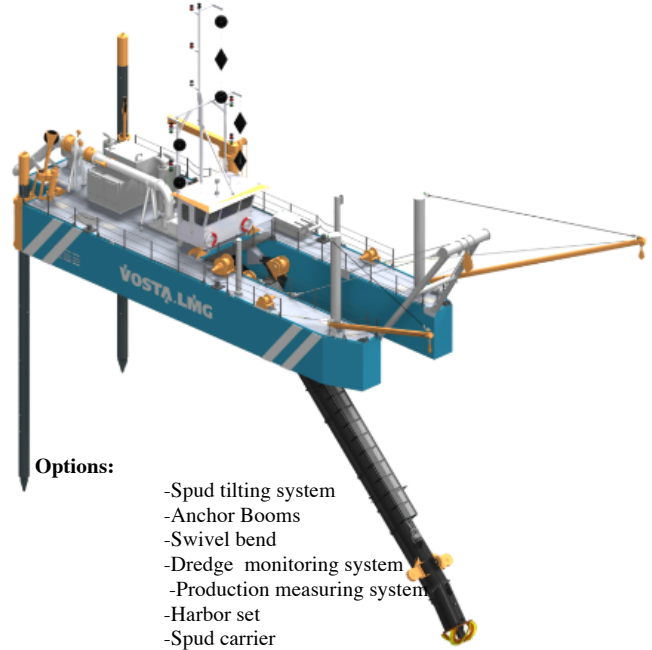


DATA SHEET CSD 450



Main Particulars

Length overall	36	m
Length over deck	24	m
Breadth, molded	7,6	m
Depth main pontoon	2,5	m
Design draught	1,4	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	TSC04
Cutter power	108	kW
Dredge pump	VOSTA LMG	450-1020
Dredge pump power	634	kW
Side winch	2	pcs
Pulling force max.	80	kN
Ladder hoisting winch	1	pcs
Pulling force max.	80	kN
Spud system		
Working and holding spud		

Deck Equipment

Deck crane	4	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	634	kW
Auxiliary engine	232	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

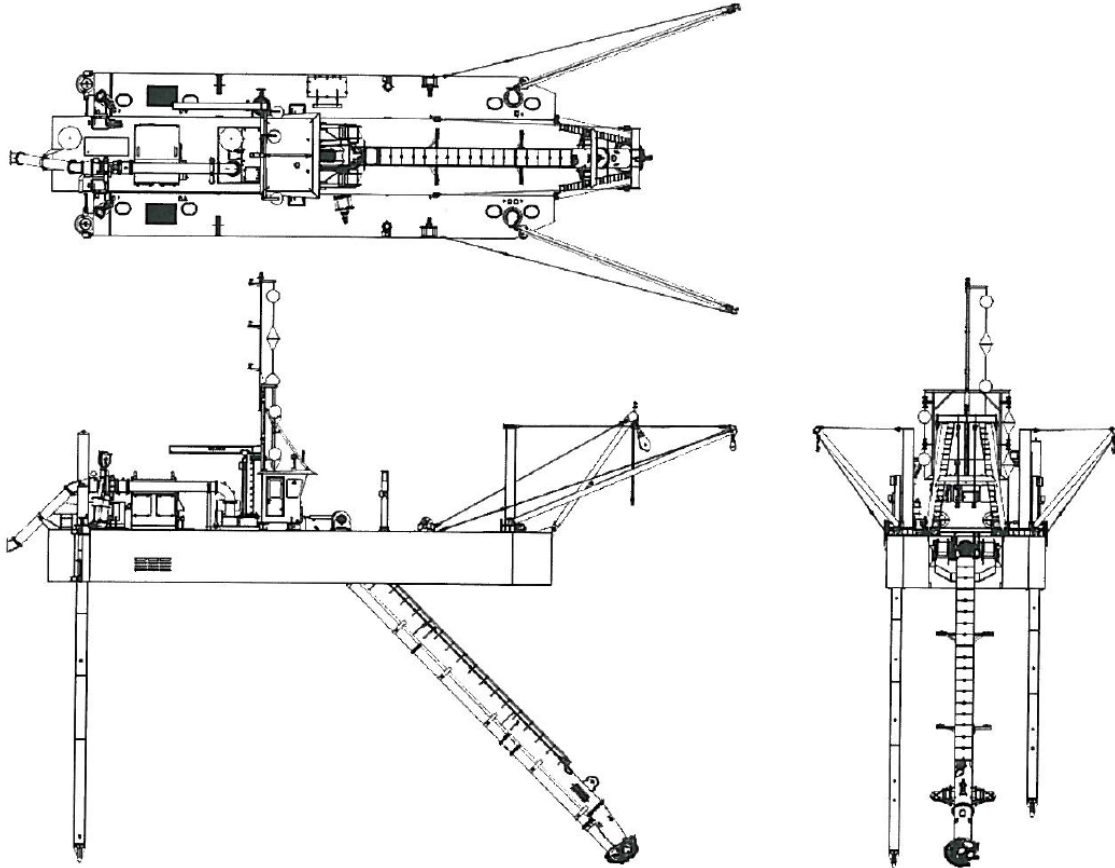
The standard dismountable cutter dredger CSD 450 is well equipped to operate in a wide range of coastal zones with several materials up to compact sand and clay. It is specialized for maintenance and land reclamation work also in shallow water areas. The dredger is optimized for dredging compacted soils.

Dedicated functions*:

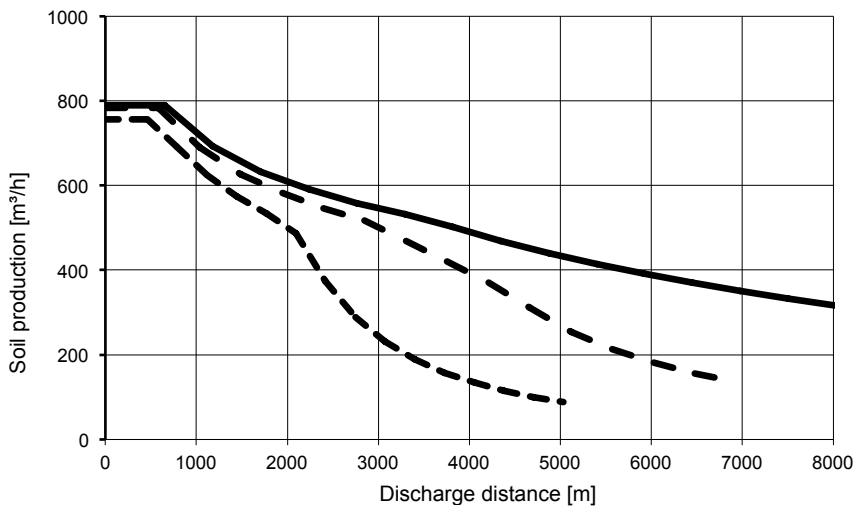
- Lowest price per cubic meter at a wide range of jobs
- Optimization of shallow water operation
- Minimization of vibration level
- Maximum of allover operation efficiency due to:
 - Optimization of anchor/spud maneuver
 - Operation with high efficient cutter head with special patented cutter teeth 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

DATA SHEET CSD 450



VOSTALMG Dredging Technology



Estimated dredge pump production diagram VL CSD 450

dredge pump type:
VL 450-1020

pump shaft power: 634 kW
nominal speed: 640 rpm

suction pipe dia.: 450 mm
discharge pipe dia.: 450 mm

pump elevation: 0 m
pipe elevation: 4 m

dredging depth: 14 m

water density: 1025 kg/m³

Remarks

- production curves for reference only
- free flowing sand conditions considered
- production limitation due to soil/cutterhead not considered
- production based on effective cutting hours

—	d50 = 0,100 mm, soil dens. 1,90 t/m ³
- - -	d50 = 0,235 mm, soil dens. 1,95 t/m ³
- · - · -	d50 = 0,440 mm, soil dens. 2,00 t/m ³