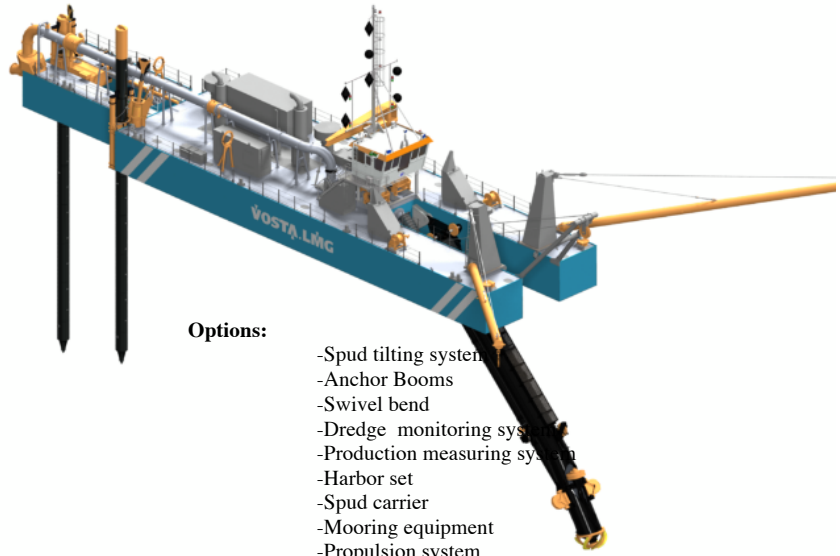


DATA SHEET CSD 650



Main Particulars

Length overall	47	m
Length over deck	35	m
Breadth, molded	10,5	m
Depth main pontoon	2,9	m
Design draught	1,98	m
Dredging depth min./max.	3 / 18	m
Suction pipe inner diameter	700	mm
Discharge pipe inner dia.	650	mm
Total weight	420	ton
Total installed power	2914	kW

Dredging Components

Cutter head	VOSTA T1	
Cutter power	450	kW
Dredge pump	VOSTA LMG	600-1625
Dredge pump power	1864	kW
Side winch	2	pcs
Pulling force max.	240	kN
Ladder hoisting winch	1	pcs
Pulling force max.	240	kN
Spud system		
Working and holding spud		

Deck Equipment

Deck crane	7	ton
------------	---	-----

Electrical System

Main generator (PF0,8)	64	ekW
Ship's main voltage	400	V
Ship's main frequency	50	Hz

Main Drives

Diesel engines		
Dredge pump engine	1864	kW
Auxiliary engine	954	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
- Additional gland pump

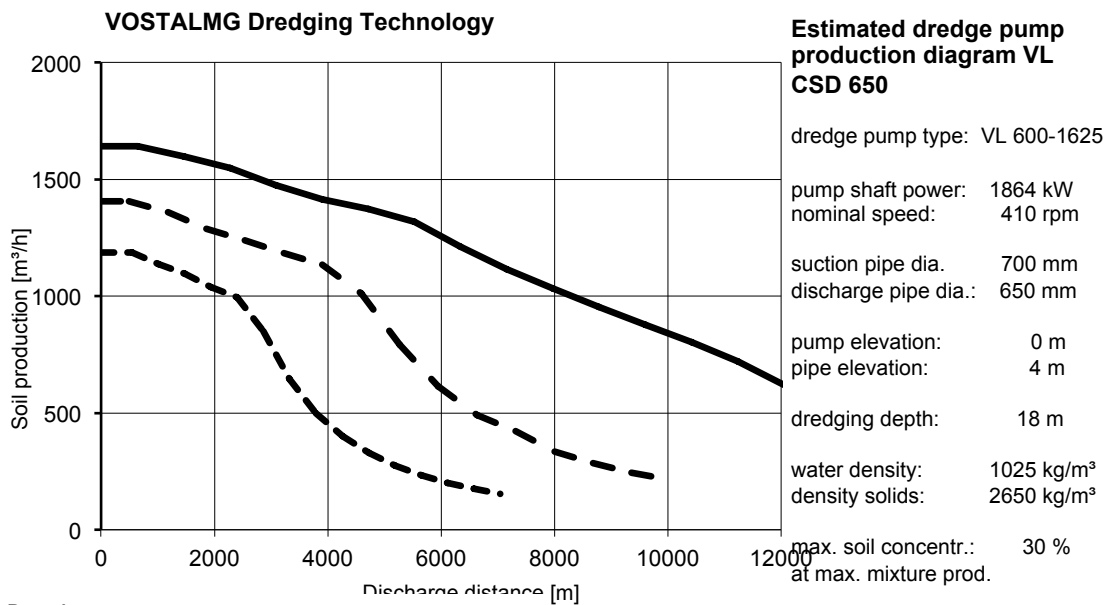
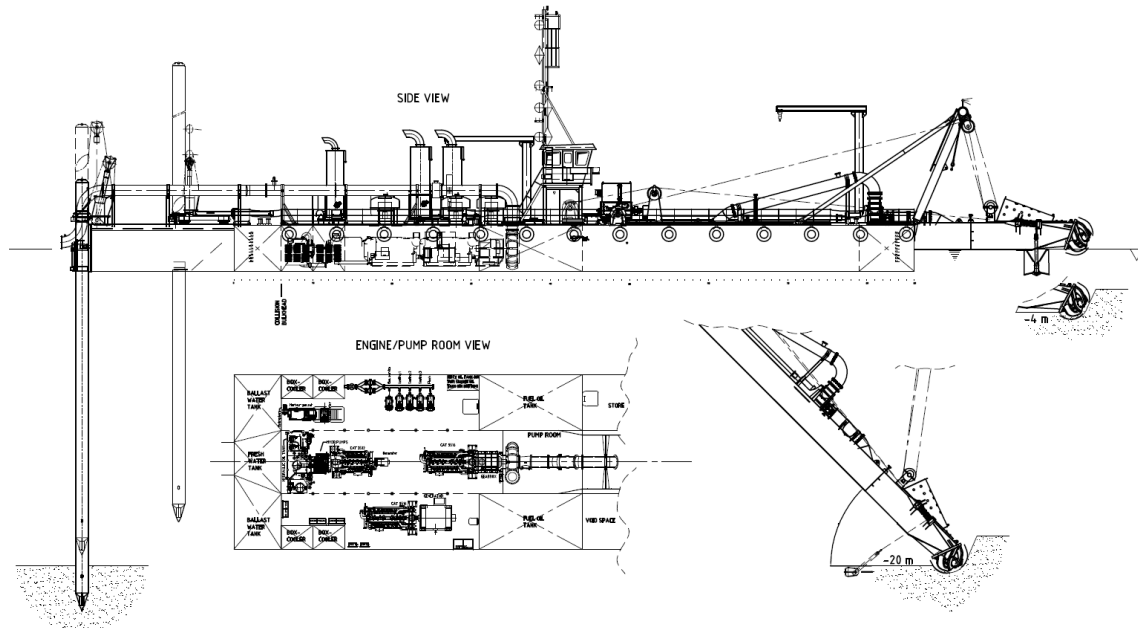
The standard dismountable cutter dredger CSD 650 is well equipped to operate in a wide range of coastal zones with several materials up to compact sand clay. It is specialized for maintenance and land reclamation work also in shallow water areas. The dredger is optimized for dredging compact soil.

Dedicated functions:

- Lowest price per cubic meter at a wide range of jobs
- Optimization of shallow water operation
- Minimization of vibration level
- Maximum of all-over 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 650



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

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