

Heavy duty dredger
Hydraulic operated winches
Dismountable pontoons
Removable spuds



CSD500 HDDE

CUTTER SUCTION DREDGER 500 HEAVY DUTY DUAL ENGINE

DIMENSIONS

Length overall incl. ladder:	33.3 m
Length over pontoons:	21.0 m
Breadth:	7.9 m
Depth main pontoon:	2.5 m
Depth side pontoons:	2.3 m
Design draught:	1.5 m

DREDGING PARAMETERS

Dredging depth (45°):	14 m
Suction pipe diameter:	550 mm
Discharge pipe diameter:	500 mm

INSTALLED POWER

Dredge pump diesel engine:	954 kW
Auxiliary diesel engine:	339 kW
Total installed:	1293 kW

WINCHES

Swing winches:	2
Wire pull:	110 kN
Hauling speed:	0-20 m/min
Ladder winch:	1
Wire pull:	110 kN

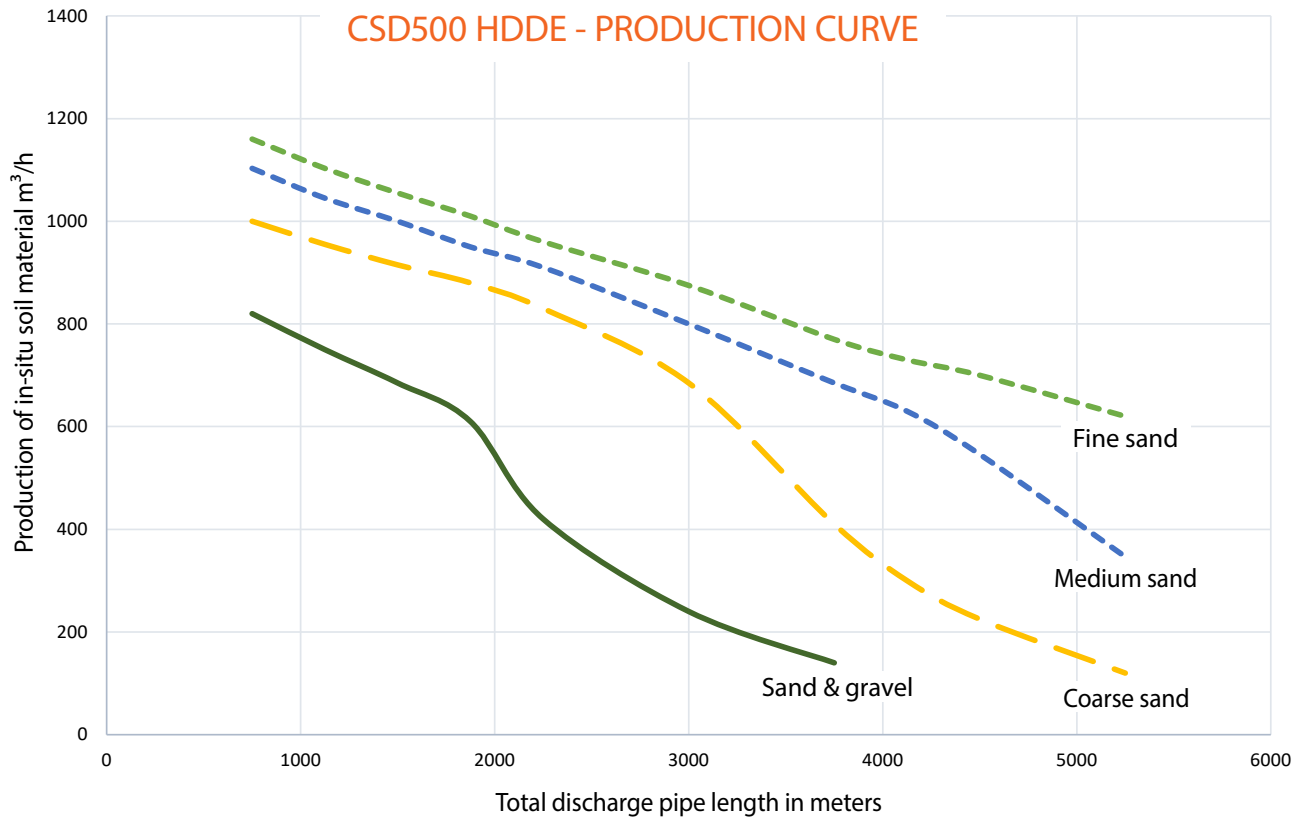
DREDGING EQUIPMENT

Cutter:	Dredge Yard multi-purpose cutter
Power:	185 KW
Speed:	0-30 rpm
Dredge pump:	Dredge Yard 500
Wear material:	GS32 / high wear resistant
Pump engine:	Caterpillar C3512

SPUD SYSTEM

Spud length:	19.95 m
Spud diameter:	559 mm
Spud leg lifting:	Cylinders (2.0 m stroke)





MATERIAL	GRAIN SIZE	IN-SITU DENSITY	REMARKS
Fine sand	d50 = 100 µm	$\rho = 1.90 \text{ t/m}^3$	No cutter limitations
Medium sand	d50 = 235 µm	$\rho = 1.95 \text{ t/m}^3$	Geodetic height: 4 m
Coarse sand	d50 = 440 µm	$\rho = 2.00 \text{ t/m}^3$	Dredging depth: 14 m
Sand & gravel	d50 = 1300 µm	$\rho = 2.20 \text{ t/m}^3$	Discharge pipe diameter: 500 mm

FEATURES

- The dredger consists of 3 dismountable pontoons
- Removable spuds
- Inboard dredge pump
- Diesel driven dredge pump
- Gearbox between engine and dredge pump
- Auxiliary diesel engine with alternator to drive hydraulic pumps
- Hydraulic driven cutter
- Cutter head with dismountable teeth
- Inspection piece in front of dredge pump
- Hydraulic operated winches
- Operating cabin is fitted on the main pontoon
- Air ventilation is provided for the main pontoon
- Spuds are operated by two hydraulic cylinders

OPTIONAL

- Anchor boom installation
- Air conditioned control cabin
- Spud carriage and/or spud tilting installation
- Swivel bend
- Other wear resistant materials for dredge pump
- Wedge piece (for shallow dredging)
- Density velocity meter
- Extended dredging depth
- Non return valve in discharge pipeline
- Dilution valve in suction pipeline (bresklep)
- Harbor GenSet
- Sanitary facilities
- Central greasing system
- BV-certification
- Alternative diesel engine brands
- Floating discharge pipeline system
- Other options available on request