

- Dismountable pontoons
- Removable spuds
- Inboard dredge pump
- Dismountable cutter head teeth



CSD450

CUTTER SUCTION DREDGER 450

DIMENSIONS

Length overall incl. ladder:	26.2 m
Length over pontoons:	18.1 m
Breadth:	6.6 m
Depth main pontoon:	2.45 m
Depth side pontoons:	1.8 m
Design draught:	1.4 m

DREDGING PARAMETERS

Dredging depth (45°):	10 m
Suction pipe diameter:	500 mm
Discharge pipe diameter:	450 mm

INSTALLED POWER

Total installed:	895 kW
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WINCHES

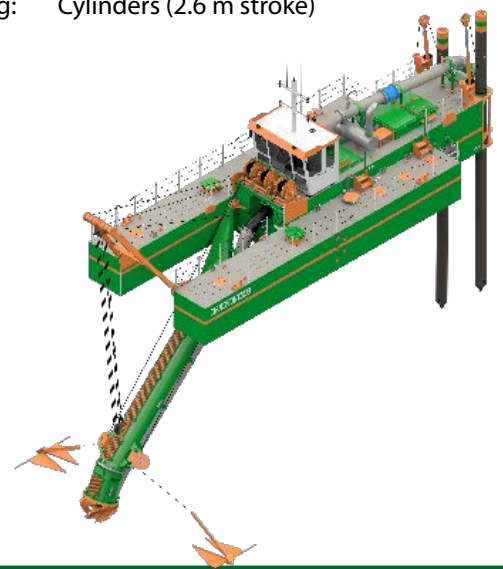
Swing winches:	2
Wire pull:	60 kN
Hauling speed:	0-15 m/min
Ladder winch:	1
Wire pull:	60 kN

DREDGING EQUIPMENT

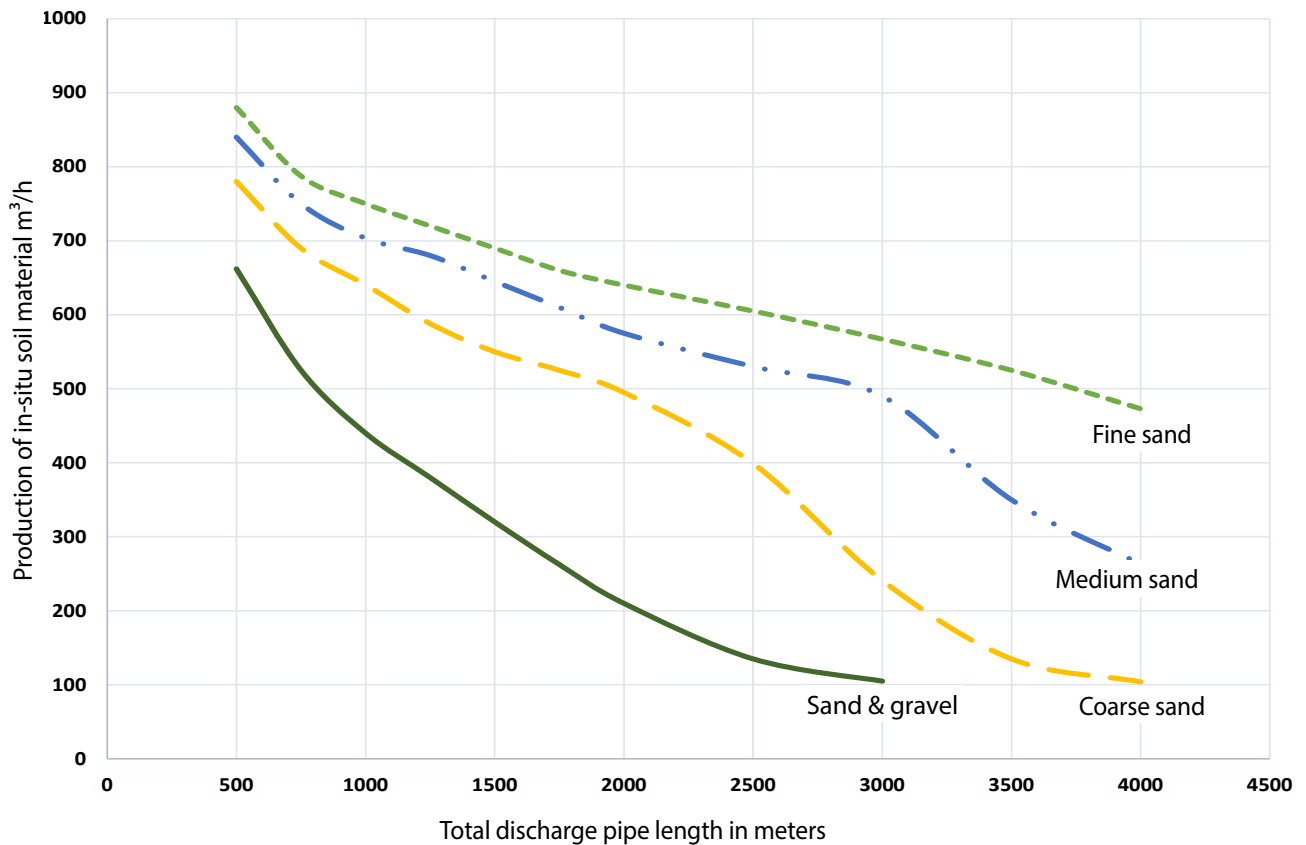
Cutter:	Dredge Yard multi-purpose cutter
Power:	112 KW
Speed:	0-30 rpm
Dredge pump:	Dredge Yard 450
Wear material:	GS32 / high wear resistant
Pump engine:	Caterpillar C32

SPUD SYSTEM

Spud length:	13.8 m
Spud diameter:	457 mm
Spud leg lifting:	Cylinders (2.6 m stroke)



CSD450 - PRODUCTION CURVE



MATERIAL

Fine sand

GRAIN SIZE

d50 = 100 µm

IN-SITU DENSITY

$\rho = 1.90 \text{ t/m}^3$

REMARKS

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: 10 m

Sand & gravel

d50 = 1300 µm

$\rho = 2.20 \text{ t/m}^3$

Discharge pipe diameter: 450 mm

FEATURES

- Dismountable pontoons
- Removable spuds
- Inboard dredge pump
- Diesel driven dredge pump
- Gearbox between engine and dredge pump
- Auxiliary diesel engine to drive hydraulic pumps
- Hydraulic driven cutter
- Cutter head with dismountable teeth
- Inspection piece in front of dredge pump
- Hydraulic operated winches
- The dredge consists of 3 pontoons
- 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
- Spud carriage installation
- Swivel bend
- Other wear resistant materials for dredge pump
- Density velocity meter
- Extended dredging depth
- Dredge automation
- Dilution valve in suction pipe line (bresklep)
- Harbor GenSet
- Spud tilting installation
- Central greasing system
- Alternative diesel engine brands:
Deutz / Mitsubishi / Cummings / Others