

- Transportable by road, rail and sea
- Self-propelled
- Cutter head with exchangeable teeth
- Removable spuds



ECO350

ECONOMIC 350 CUTTER SUCTION DREDGER

DIMENSIONS

Length overall incl. ladder:	22.9 m
Length over pontoons:	17.1 m
Breadth:	5.5 m
Depth main pontoon:	1.6 m
Depth side pontoons:	1.5 m
Design draught:	1.0 m

DREDGING PARAMETERS

Dredging depth (45°):	10 m
Suction pipe diameter:	350 mm
Discharge pipe diameter:	350 mm

INSTALLED POWER

Total installed:	653 kW
------------------	--------

WINCHES

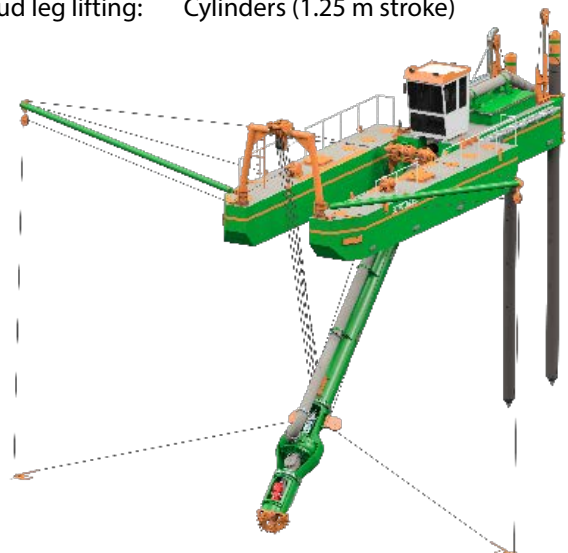
Swing winches:	2
Wire pull:	50 kN
Hauling speed:	0-15 m/min
Ladder winch:	1
Wire pull:	50 kN

DREDGING EQUIPMENT

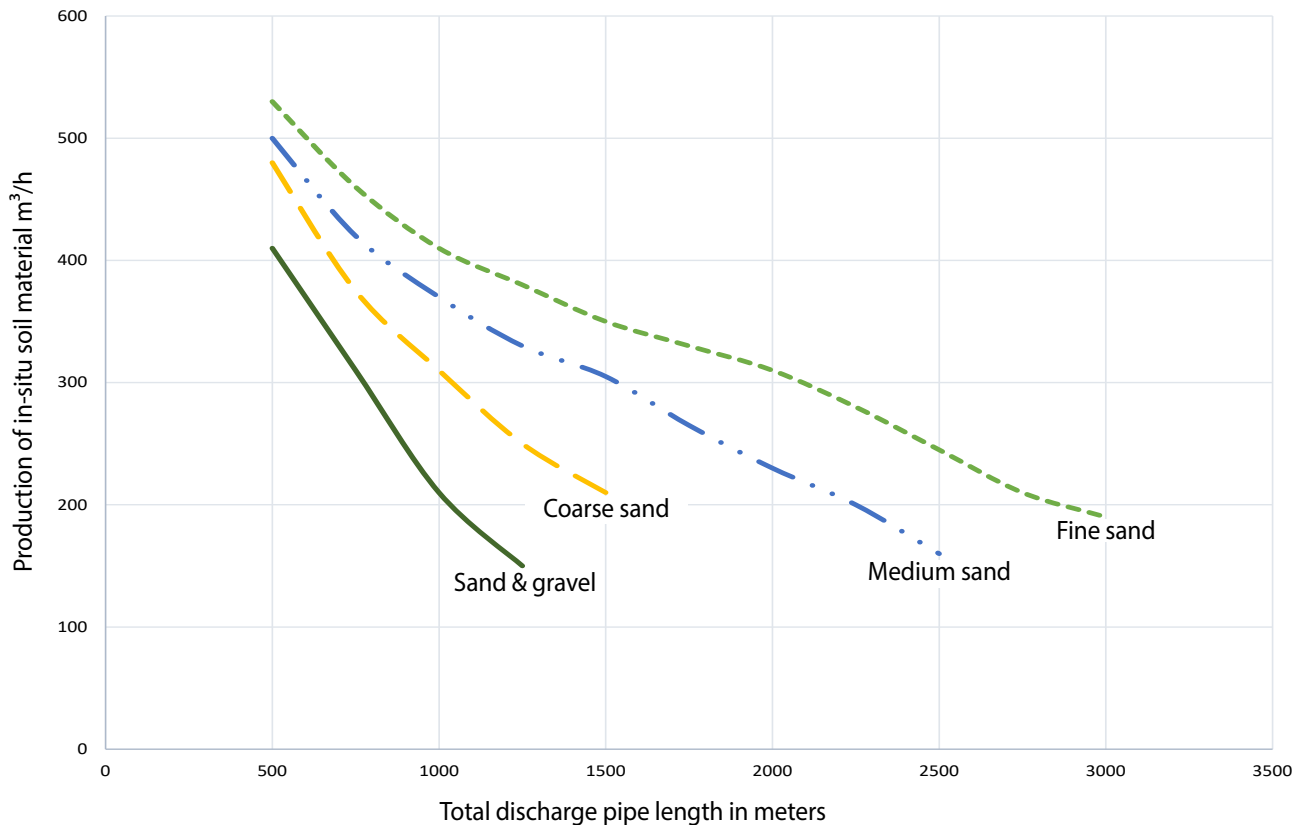
Cutter:	Dredge Yard multi-purpose cutter
Power:	65 KW
Speed:	0-30 rpm
Dredge pump:	Dredge Yard 350
Wear material:	GS32 / high wear resistant
Pump engine:	Caterpillar C27

SPUD SYSTEM

Spud length:	12.5 m
Spud diameter:	406.4 mm
Spud leg lifting:	Cylinders (1.25 m stroke)



ECO350 - PRODUCTION CURVE



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: 10 m
Sand & gravel	d50 = 1300 µm	$\rho = 2.20 \text{ t/m}^3$	Discharge pipe diameter: 450 mm

FEATURES

- Dismountable pontoons
- High efficiency submerged dredge pump
- Ladder hoisting gantry and ladder hoisting winch
- Two swing winches
- Cutter head driven by hydraulic motor
- Cutter head with exchangeable teeth
- Self-propelled
- Propulsion operated by hydraulic motor
- Radiator cooled engine
- Inspection piece in front of dredge pump
- Suction pipe on ladder and discharge pipe on deck
- Transportable by road, rail and sea
- Operating cabin fitted on the main pontoon
- Spuds operated by 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
- Harbor genset
- Spud tilting installation
- Central greasing system
- Alternative diesel engine brands
Deutz / Mitsubishi / Cummings / Others