

# Deep (Cutter) Suction Dredger 600



## GENERAL

The EDCSD600 is a fully electrically driven dredger which is powered via an external power source. The dredger can be delivered as cutter suction or plain suction dredger configuration. A combination of both is also possible where the dredger is suitable for quick conversion to the desired configuration.

Type	EDCSD 600
Basic functions	Mining, capital and maintenance dredging Cutter configuration: Dredging compacted soils and where precise operation is required. Plain suction configuration: Sand mining operations where large dredging depths are required.

## DREDGING FEATURES

<b>Cutter configuration</b>	
Max. cutter depth	-25 m
<b>Plain suction configuration</b>	
Max. suction depth	-40 m

## DREDGE INSTALLATION

Dredge pump type	Damen submerged SDP600MP
Diam. suction/discharge pipe	600 mm
Spherical passage pump	290 mm

## SUCTION EQUIPMENT

<b>Cutter configuration</b>	
Cutter type	Crown model (changeable cutter teeth)
Cutter power	110 kW
Cutter diameter	1,625 mm
<b>Plain suction configuration</b>	
Plain suction head	Basket with jet water nozzles
Jet water installation	1,100 m <sup>3</sup> /h @ 8 bar

## DRIVE INSTALLATION

Dredge pump motor	Electric motor
Continuous power	1,425 kW
Hydraulic installation	Driving cutter and spud hoisting
Electrical installation	Driving dredge pump and winches
	24 V DC and 230/400/690 V AC

## Plain suction configuration

Jet water pump	Electric 290 kW
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## PRINCIPAL DIMENSIONS

Length over pontoons	Approx. 34 m
Beam	9.00 m
Depth	2.50 m
Draught	1.60 m
Air draught	8.10 m
<b>Cutter configuration</b>	
Length o.a. incl. cutter ladder	Approx 45 m
Total weight	230 ton
<b>Plain suction configuration</b>	
Length o.a. incl. suction pipe	Approx 55 m
Total weight	240 ton

## DECK MACHINERY

Ladder hoisting	Electric winch, 120 kN, 0-15 m/min
<b>Cutter configuration</b>	
Side wire winches (2x)	Electric winch, 80 kN, 0-15 m/min
Spuds (2x)	Ø 610 mm, length 30 m
Spud hoisting (2x)	Hydraulic cylinder
<b>Plain suction configuration</b>	
Manoeuvring winches (4x)	Electric winch, 80 kN, 0-15 m/min
Suction pipe winch (1x)	Electric winch, 80 kN, 0-15 m/min

## INSTRUMENTATION

Dredging depth indicator	
Vacuum and pressure indication of dredge pump	

## REMARKABLE FEATURES

- Fully electrically driven, power via external power source (power source excluded)
- Submersible dredge pump for high mixture density
- Configurable as cutter or plain suction dredger
- Dismountable design
- Most components fit in containers (lower transport cost)
- Spacious ergonomic designed control cabin
- One operator can control the entire dredger from the control cabin
- Operators cabin with air conditioning and heating
- Manual deck crane



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