

EQUIPMENT SHEET

MEGALODON

PRE-TRENCH & BACKFILL PLOUGH



The Megalodon provides our customers with a pre-trench and backfill cable protection solution. The plough can handle up to 150 t continuous pull force and is designed to perform in an extensive range of challenging soil conditions along planned cable routes.

The plough share profile is designed such that it requires the lowest possible bollard pull to achieve a wide variance of trench depths, limits the environmental footprint and enable Boskalis to efficiently trench and provide the necessary cover. The Megalodon is designed to work along cable routes that are cleared by the T-Rex XL boulder clearance tool.

The Megalodon is equipped with state-of-the-art subsea sensor technology in order to position and monitor the plough as accurately as possible.

MAIN DATA

Dimensions (L x W x H): ploughing mode(1) backfill mode (2)	16.5 x 6.7 x 7.7 m 15.3 x 8.8 x 8.7 m
Design strength	Sustained pull load: 150 t
Peak load	200 t
Operating water depth	Maximum: 500 m
Weight in-air/submerged weight: in ploughing mode 54.7 t / 41.34 t in backfill mode 61.3 t / 46.93 t	
Max. steering angle	11 degrees
Max. pitch and roll	15 degrees

PERFORMANCE TRENCHING

Trench profile	Y-shaped share
Trench depth	up to 2.1 m (single or multi-pass)
Soil strength	10 – 600 kPa
Share lubrication pressure	6 har



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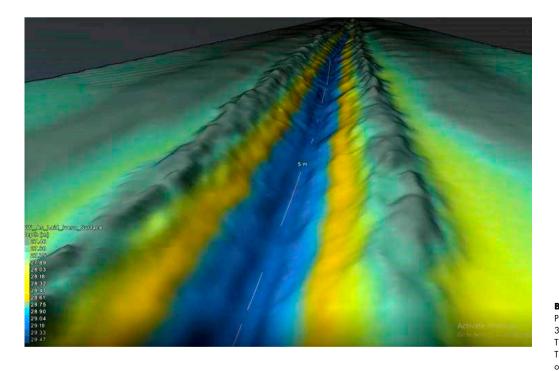
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PERFORMANCE BACKFILL		
Backfill blade width	9 m	
Skids	Forward and aft skids for stability	
MECHANICAL		
Construction	High-strength steel chassis	
Wear parts	Hardox 400, hard faced to reduce wear in critical areas	

OTHER EQUIPMENT	•
Umbilical system	Standard winch system 1,200 m of umbilical Max. 30 m/min line speed
Control system	Integrated control room
Shallow water positioning buoy	For operations in shallow water (<10 m)

INSTRUMENTATION & SURVEILLANCE		
Cameras	2 x low light cameras 2 x colour cameras	
Lamps	4 x LEDs	
Pan and tilt	3 x P&T unit	
Force	0 - 200 t load pins in tow points	
Heading/inclination	iXblue Rovins and Octans	
Plough geometry	Linear Transducers in cylinder and rotary sensors on hinge points for redundancy	
Profiler and sonars	1 x Obstacle avoidance sonar 4 x Profiling sonars 2 x Gemini multibeam sonars 2 x Altimeters	
Additional survey capacity	2 x RS232, spare power & ethernet connections	





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