

MD3 PLOUGH



MD3 is manufactured by SMD, and is recognised globally as setting the standard in cable ploughing, reliably trenching in most soils including clays and sands. Using patented technology, the plough is designed to minimise pull force requirements and provide effective trenching capability from zero to 2.2m depth. Coupled with a tow winch, umbilical and LARS system.

MD3 PLOUGH

Weight

Air Weight	21.2ton
Submerged Weight	18.0ton

Dimensions

Skid Down	10.00m (L)
Drawbar Down	4.66m (H)
Over Stabilisers	5.00m (W)

Operation

- Pulled by Tow Wire from Surface Vessel	
Operating Depth	1,500m
Towing Force	Normal ploughing (Up to 2.2m deep) Up to 80te
Max. Permissible pull at Plough	80ton
Burial Depth	Up to 2.2m
Cable Size	17mm to 150mm Diameter
Repeaters	Up to 380mm Diameter X 3m Long
Cable Splice Boxes	Up to 150mm Diameter
Cable Bend Radius	1.5m Minimum along the cable path
Soil Type	All with Good rock ripping capability In soft mud - Capacity 5kPa minimum
Cable Tracking	Visual by means of the forward TV camera and sensing by lateral mounted cable angle detector
Ploughing Speed	Up to 1m/s - Dependent on seabed condition

Operating Conditions

Operating Temperature	+40C to -4C
Ambient Temperature	+50C to -15C

Hydraulics

Fittings Motor	3-Phase, 2kV, 50/60Hz, 15kW
Pump	Gear pump, 36L/min, 260barg
Reservoir	Flexible pressure compensated, 100 litres working capacity

Thruster

- 1 X 300mm Blades with auto heading (Curvtech)

Subsea Electronics and Telemetry

Test Pressure	1.25 X Working pressure
Mounting	Anti vibration type

Instrumentation

Pressure Transducers	- Submerged Depth (0-160barg)
	- Hydraulic System Pressure (0-400bar Vented)
	- Depressor Pressure
Linear Transducers	- Hydraulic Oil Volume
	- Port Tow Angle
	- Stbd Tow Angle
Altitude	Echo sounder (Range 0.6m to 30m)
Heading	Octans Gyro

Surveillance

Cameras	3 X Low Light 4500m (Kongsberg Simrad)
Lamps	5 X 24VDC LED 3000m (Bowtech)
Pan and Tilt	2 X 24VDC Units (Sub-Atlantic)
Obstacle Avoidance	Digital Sonar 6000m (Kongsberg Mesotech)
Acoustic positioning	Transponder (AAE)