

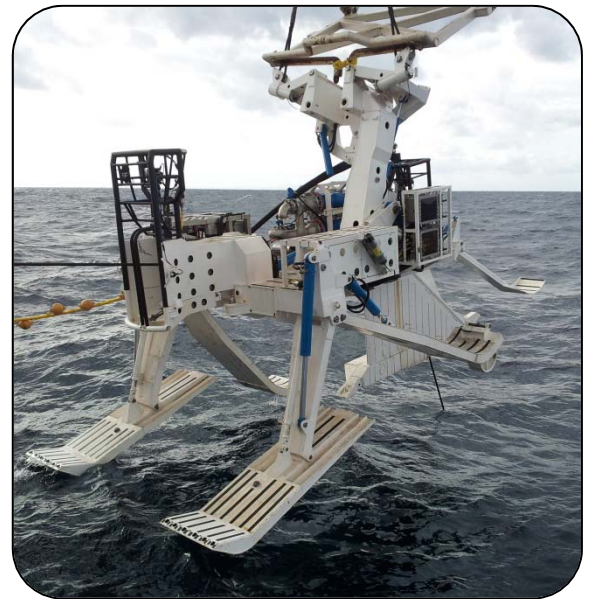
THE INDUSTRY STANDARD CABLE PLOUGH

MD3 PLOUGH

The MD3 Plough 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 3m depth. Its performance can be enhanced with jetting and rock ripping upgrades. Coupled with a tow winch, umbilical and LARS system, SMD are able to supply a turnkey cable burial solution.

FEATURES

- 80te max pull capability
- True zero to 3m max trench depth capability
- Repeater burial capability to 3m
- Effective power steering
- Jetting upgrade for enhanced burial in sand
- Rock tooth upgrade for soft rock conditions
- 2000m maximum water depth
- SMD DVECS™ Control System
- Turnkey system including umbilical, LARS and tow winch
- Unique “multi-depth” hinged chassis design for max safety
- Cable and flexible joint burial up to 160mm diameter, 1.5m MBR



SMD CUSTOMISATION SERVICE

SMD understand that every customer is different and therefore have individual needs from their systems. In order to meet your specific requirements SMD can customise our vehicles using our range of standard components to suit your preference and performance requirements.

SYSTEM SPECIFICATIONS

GENERAL

Depth rating	2000msw
Dimensions	
Length	9.1m
Width	5.1m
Height	4.4m
Weight in air (skids)	22te
Submerged Weight	19te
Max tow load	80te

PERFORMANCE

Trench Depth.....	Variable 0 to 3m
Max. Cable Diameter.....	20 to 160mm
Min. Cable Bend Radius	1.5m
Max. Repeater Diameter.....	380mm
Steering	+/- 15 degree

MECHANICAL

Construction.....	High strength steel chassis
Wear Parts.....	Replaceable wear-resistant steel
Other	Stainless steel fittings and housings

TRENCHING SYSTEM

Configuration	Passive narrow parallel sided share
.....	with repeater burial flaps
.....	to temporarily widen trench
Optional Jetting.....	250kW
Water supply (approximate)	400m ³ /hr@15bar
.....	Plough share heel jetting
.....	and fwd jetting arm
.....	Upgrade to Umbilical and Winch
.....	Upgrade to Power and Control System
Optional Rock Ripper	Deployable rock tooth
.....	(in front of share)
.....	0.5m maximum trench depth
.....	50te maximum tow load

HYDRAULIC SYSTEM

Installed Power.....	15kW 36L/min @ 250bar
Cylinders.....	Smart heavy duty marine type
Valves	Directional and Counterbalance
Valve Packs.....	Stainless Steel, Oil Compensated
Manifolds, Pipes & Fittings	Stainless Steel
Hoses	Multi-spiral flexible hoses

SUBSEA ELECTRONICS

Electronics.....	One atmosphere pressure vessel
Depth Rating.....	2000m
Test Pressure	1.25 x Working pressure
Data Transmission	Fibre Optic Multiplexer

SUBSEA SURVEILLANCE

Cameras	1 x Monochrome zoom
.....	2 x Monochrome low light
.....	1 x Colour low light
Lamps	6 x Dimmable LED subsea lamps
Pan and Tilt	2 x robust 24V P&T units
OA Sonar.....	Digital Kongsberg Simrad 974

SUBSEA INSTRUMENTATION

Heading	Fluxgate compass
Altitude	Echosounder
Pitch and Roll	Inclinometer
Load	Shear pin load cell
Displacement.....	In-Cylinder transducer
Distance.....	Rotary encoder
Pressure	Absolute and Differential
Position.....	Proximity sensor
Hydrophone.....	Benthos
Wear Indicator.....	Share point

OTHER EQUIPMENT

Control System	DVECS™ housed in 20ft ISO container
Power System	Housed with control system
.....	Or ISO A60 container
Umbilical System	4000m buoyant umbilical
.....	and 3te rendering winch
Winch HPU	22kW deck mounted
Spares Package.....	Optional packages available

OPTIONS

A-Frame Handling System	SMD 2-Cylinder Wide-Angle
.....	35T SWL Sea State 5
.....	Upgrade to deck HPU
Tow Winch.....	Various options available
Plough Beach Ops Kit.....	Radio telemetry
.....	Stunt Control Box
.....	Aft Pull beach skid
.....	(Beach Power Required) 50kW