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
- Optional Jetting: 250kW
- Water supply (approximate): 400m3/hr@15bar
- Plough share heel jetting
- Upgrade to Umbilical and Winch
- Upgrade to Power and Control System
- Optional Rock Ripper: Deployable rock tooth
  - 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
- Submerged Dimensions:
  - Steer
  - Load

**SUBSEA ELECTRONICS**
- Electronics: One atmosphere pressure vessel 2000m
- Depth Rating: 1.25 x Working pressure
- Test Pressure: 1 x Colour low light
- Data Transmission: Fibre Optic Multiplexer

**SUBSEA SURVEILLANCE**
- Cameras: 1 x Monochrome zoom
- 2 x Monochrome low light
- 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: Inclimeter
- 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
- Umbilical System: 4000m buoyant umbilical
- Winch: 22kW deck mounted
- Spares Package: Optional packages available

**OPTIONS**
- Upgrade to deck HPU
- Various options available
- Plough Beach Ops Kit: Radio telemetry
- Stunt Control Box
- Aft Pull beach skid
- (Beach Power Required) 50kW