

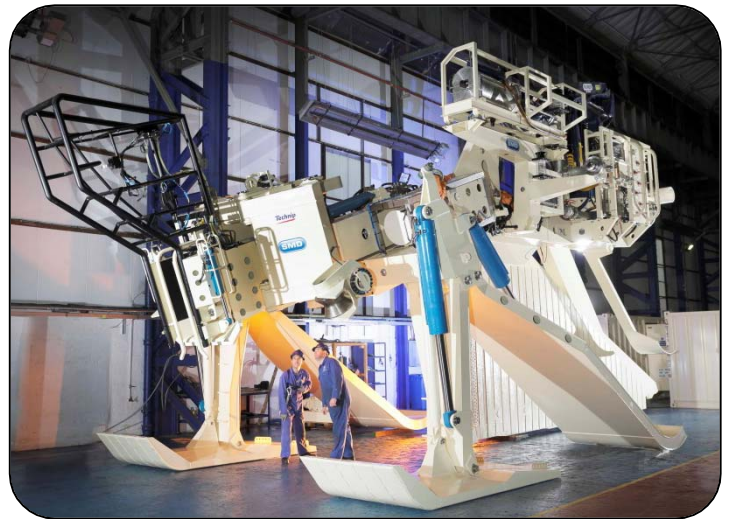
HEAVY DUTY PLOUGH

HD3-300

The HD3-300 plough provides a high performance trenching solution for larger diameter cables and flexible umbilicals. Using patented technology, the plough is designed to minimise pull force requirements and provide effective trenching capability up to 3m depth. The diverless loading system allows post lay burial in deepwater. Coupled with a tow winch, umbilical and LARS system, SMD are able to supply a turnkey flexible burial solution.

FEATURES

- 150 tonne maximum pull capability
- up to 3.3m max trench depth capability
- Hydraulic power steering
- 1500m maximum water depth
- Share jetting system 250 – 500kW
- Suitable for cable up to 300 mm diameter, with a 5m MBR
- Unique multi-depth, hinged chassis design for maximum safety
- Diverless subsea product loading & unloading
- Emergency product unload
- SMD DVECS II™ control system
- Turnkey system including umbilical system, LARS and tow winch



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.....	1500msw
Dimensions	
Length	15.0m
Width	6.5m
Height	6.6m
Weight in air (skids)	45te
Submerged Weight	39te
Max tow load.....	150te

PERFORMANCE

Trench depth	0-3.3m
Maximum cable diameter	30mm – 300mm
Minimum cable bend radius	5m
Steering	±12 degrees

MECHANICAL

Construction	Steel Chassis
Wear parts	Replaceable wear resistant steel
Other	Stainless steel fittings and housings

TRENCHING SYSTEM

Configuration	Parallel sided blade with aggressive point, sharp leading edge and side ramp
Jetting	200-500kW
Water supply (approx.).....	800m ³ /1600m ³ @ 6bar

HYDRAULIC SYSTEM

Installed power	15kW HPU
Cylinders	Heavy duty marine type
Valves	Dual over-centre valves
Valve packs	Stainless steel, oil-filled and pressure compensated
Manifolds pipes and fittings	Stainless steel

SUBSEA ELECTRONICS

Electronics pod	One atmosphere pressure vessel
Depth rating.....	1500m
Test pressure	1.25 x working pressure
Data transmission	Fibre optic

SUBSEA SURVEILLANCE

Cameras	2 x Kongsberg OE15-100
.....	1 x Kongsberg OE14-366
.....	1 x Kongsberg OE15-108
Lamps	6 x Bowtech 1600 with dimming
Pan and tilt	3 x Sub-Atlantic P&T units
.....	1 x Sub-Atlantic rotator unit
OA Sonar	Tritech Super SeaKing

SUBSEA INSTRUMENTATION

Heading	Tritech iFG/iGC fibre optic & Fluxgate compass
Hydrophone	Benthos

DIVERLESS SUBSEA UNLOADING

Cable unloading	Remote subsea crane (aft mounted) 3 tonne grab 2 x cylinder actuated bellmouth tines Tipping trough High lift depressor Cylinder actuated cable feelers
-----------------------	--

OTHER EQUIPMENTY

Control System	SMD DVECS II™ Control system or container
Power system	Control system or container
Umbilical System	typically 2000m armoured umbilical on a 5te SWL winch
Winch HPU	Deck mounted
Spares Package	Optional packages available

OPTIONS

A-Frame Handling system.....	2 cylinder wide angled 50te SWL, sea state 5
Tow winch.....	Various options available
Plough beach ops kit	Radio Telemetry Stunt control box Aft beach pull skid (Beach power required)