

HIGH POWERED INSTALLATION AND MAINTENANCE ROV

Q-TRENCHER 1000

The Q-Trencher 1000 ROV provides high power trenching capability for the burial of cables, umbilical and small diameter pipes up to 3m deep. The ROV uses variable high flow or high pressure jetting to optimise the trenching to suit the conditions. It can also deploy a rear eductor to enhance burial of large diameter product. With its high thrust, the ROV can perform rapid post lay survey. It can also be fitted with a suite of tools for maintenance operations. SMD offer a turnkey, integrated solution including SMD designed high sea state LARS and umbilical system.

FEATURES

- 1000hp of installed power
- up to 3m max trench depth capability
- Up to 4 knot swimming for survey
- 2000m maximum water depth
- Optional rear eductor for large product burial
- Optional track modules for hard ground trenching
- Variable high flow or pressure jetting for optimized trenching
- Cable maintenance tools package incl. manipulators, cable cutter and clamp
- DVECS robust distributed control platform provides reliable, ergonomic operations and good diagnostics
- Proven Curvetech™ components throughout
- Range of SMD designed A-frame based LARS for standard and high sea states



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 5.0m
 Width 4.2-5.0m
 Height 3.4m
 Weight in air (skids) 20.0te
 Submerged Weight Buoyant
 Max Bollard Pull.....2100kg

PERFORMANCE

Vertical 1.5 knots
 Fore / Aft 4.0 knots
 Lateral 2.0 knots
 ROV Power 1000hp (750kW) total:
 2 x 500hp (375kW) 4-pole HPUs

THRUSTERS

Vectored / Forward 4 x Curvetech HTE500
 Side 2 x Curvetech HTE500
 Vertical 4 x Curvetech HTE500

MECHANICAL

Construction High strength aluminium space frame
 Buoyancy Syntactic foam with macrospheres

JETTING SYSTEM

Main Jet Tool Configuration Twin leg jet tool with fwd/
 downward facing jets
(sub seabed) and cable depressor
 Trench Depth 0 to 3.0m standard
 Width Control 50mm to 400mm– remotely variable
250 to 600mm in pipe trenching mode
 Water Supplytwin hydraulically driven water pumps
Variable 0 to 2500m3/hr and 4 to 6 bar- low pressure
Variable 0 to 1000m3/hr and 10 to 15 bar- high pressure

Forward Jet Tool Configuration Twin jet device
(above seabed) which jets down
either side of product.
 Trench Depthup to 1.0m (soil dependent)
 Water Supply 250-500m3/hr
 Deployment hydraulically actuated

OPTIONAL TRACK MODULES

Construction Bolt on modules with hydraulically driven
 plastic track plates on standard running gear
 Speed 0 to 2km/hr

OPTIONAL DREDGE SYSTEM

Configuration Twin leg aft mounted eductor
 with hydraulically driven dredge pump
 Dredge Depth 0 to 2.0m standard

CABLE TRACKING PACKAGE

Cable detection and survey
 Tone detection TSS350
 Pulse Induction TSS440
 Other O/A Sonar and cameras
 TSS440 Deployment hyd. actuated frame

CABLE TOOLS PACKAGE

Manipulators 2 x 7 function
 Cable Cutter up to 100mm
 Cable Clamp up to 100mm

SUBSEA ELECTRONICS

Electronics PodOne atmosphere pressure
 vessel
 Depth Rating 2000m
 Communication Fibre Optic MUX
 Vacuum Port Connection point for vacuum
checking of seals in faceplate.
 Spare channelsbuilt in spare RS232,
 RS485, Ethernet 110V, 24V

SUBSEA SURVEILLANCE

Camerasup to 8 cameras
 (HDTV optional)
 Lampsup to 12 x 250W, (2 x 400W HMI optional)
 Pan and Tilt up to 6 x robust 24V P&T units
 Sonar Trittech/ Kongsberg
 Gyro Fibre Optic
 Doppler Velocity Log (Optional) Workhorse Navigator
 Profilers (Optional) Trittech/ Kongsberg/ Multi-beam
 Acoustic Positioning (Optional)to suit vessel

OTHER EQUIPMENT

Control System 20ft ISO container
 Active chair or console layouts
 SMD DVECS system
 Power Systemhoused in 10ft ISO container
 LARS Sea State 5 A-frame with umbilical lift
Option for Sea State 7 with cursor deployment
 Umbilical Winch..... Sea state 5 umbilical lift
 Option for Sea State 7 with slack accumulator
 Deck HPU 2 x 150kW