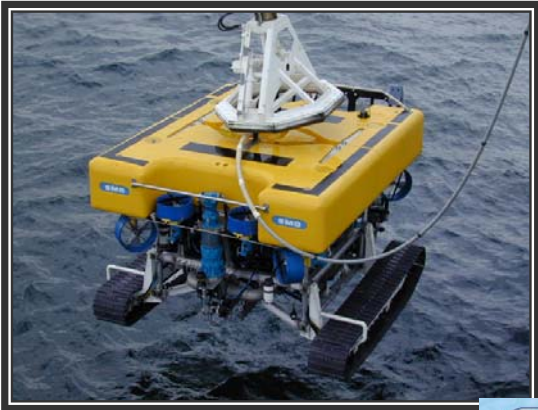
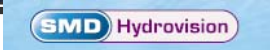


SMD Nereus 300kW ROV



Nereus 4



CABLE MAINTENANCE ROV

Depth Rating	2,500 MSW
Power	300kW
Configuration	Free Fly / Tracked Modes
Control System	Single Mode
.....	Fiber Optic PC Based
Burial Performance	Up to 2 meter Burial
.....	1m @ 45Kpa
Maximum Jet Pressure	5 bar
Maximum Water Flow	16,000 lpm
Lift Point	Variable

The 300 kW Nereus type is a highly flexible cable maintenance ROV system offering two modes of operation; 'Free flying' and 'Tracked' capable of operating down to a water depth of 2500m..

The tracked mode requires significantly less hydraulic power for moving the vehicle forward and therefore allows more power to be directed to the jetting system. All of the power can be used to drive the thrusters when free swimming. When jetting, up to 250kW of this hydraulic power is directed to drive the water pumps on the jet tool. Due to the wide track pad (500mm) this mode of operation is suitable for soil conditions with a minimum soil bearing capacity of only 3kPa or greater.



General

Operating depth2500m (max.)
 Dimensions (with tracks)
 Length3.8m
 Width3.6m
 (3.2m without tracks)
 Height2.5m
 Weight in air (ROV & Jetter)8,300kg
 Weight in air (Inc. Tracks)9,500kg
 Maximum bollard pull1,000kg
 Heading Control Auto on Compass Heading
 Auto on Cable Heading
 Manual
 Vehicle power300kW
 Electro-hydraulic power 3kV 4 pole
 Horizontal thrusters4 off
 Sub-Atlantic SA420/Rexroth A6VM55
 Vertical thrusters4 off
 Sub-Atlantic SA380/Rexroth A6VM28

General Instrumentation

Pressure transducers System pressure
 System boost pressure
 Motor boost pressure x
 2 Water depth
 Linear transducers Oil reservoir volume
 Water pressure (jet tool)
 Jet legs open/close
 Water ingress..... Oil reservoir
 Valve tanks x 8
 Electrical termination
 Pods x 2
 Temperature Hydraulic oil
 Motor oil
 Motor windings
 Pod
 Compensator Level Alarm Umbilical Termination
 Motor

Cable Handling

Manipulators:
 2 x 7 function Schilling extended 'Conan' arms.
 Cable cutter: 1 x Webtool HCV100
 Cable gripper:1 x Slingsby TA17 cable clamp
 cable diameter 15-100mm
 20000kg max. line pull

Burial Capabilities

Operating depth2500m
 Burial depth..... Variable from 0 - 1500 mm
 with cable depressor
 Cable capacity Variable width 100 - 400 mm
 Water Pump: 2 X Variable speed hydraulic drive
 single stage
 Maximum jet pressure 5 bar
 Maximum water flow 16,000 lpm
(This capability allows the ROV to meet the required 2 m burial depth in consolidated soils to 50 KPa and 1 meter burial in soils from 50 to 100 Kpa. Sea bottom conditions dictate burial rates and multiple passes may be required to meet these burial depths)
 Hydraulic functions..... tool depth
 tool width
 depressor
 Transducers tool depth
 tool width
 depressor position
 water pressure
 cable detect (2 in depressor)

Surveillance Equipment

Cameras:3 x mono
 3 x color
 Lighting: 2 x 150W, dimmable lamps
 10 x 150W, lamps
 Pan & tilt units: 3 x Pan & Tilt)
 2 x Rotator
 Search & OA sonar: ..1 x Kongsberg Simrad MS 900
 2 x Tritech SeaKing
 Dual Frequency Profiling Sonars
 Vehicle Tracking System 2 x acoustic beacons
 Cable tracking system:.....
 TSS 340/350 Dualtrack (combined) System
 GyroSolid state gyro
 AltitudeSimrad Mesotech 807 0.5 - 60m