

Pioneer HD

WORK-CLASS ROV



The Pioneer HD is a real work horse ROV system designed and built in-house to optimise reliability and operability.

Based on the highly successful Pioneer series of ROV, the Pioneer HD has been brought up-to-date to meet the dynamic challenges of the offshore exploration and production industry.

- 1500m depth rating
- 3.0 tonne through frame lift
- Options for 100hp & 120hp hydraulic power units
- Weight in air 2200kg
- Designed & built in-house
- Tried & tested ROV system proven in the field
- Top-hat tether management system or free-swimming modes
- Wide range of manipulators & intervention tooling

Dimensions & Weights

Length	2000mm
Width	1700mm
Height	1900mm
Weight in Air	2200kg
Through Frame Lift Capacity	3000kg
Payload	100kg
Depth Rating	1500msw

Propulsion System

The vehicle is propelled by 6 Innerspace thrusters or 6 Curvetech HT300 thrusters as an option

100hp HPU

Shaft power	100hp/ 75kW
Forward	>560kgf
Vertical	>200kgf
Lateral	>560kgf

120hp HPU

Shaft power	120hp/ 89kW
Forward	>705kgf
Vertical	>456kgf
Lateral	>705kg

Thruster configuration: Four horizontal vectored, two vertical

Video System

Recording Format DVD
Provision for six cameras, four with focus and one with zoom control

Light Output (available)

Standard fit of six 250W diffused lights
Three 115Vac supplies at 500W

Control Sensors

Auto heading
Auto depth

Indication Sensors

Heading (digital & analogue)	+/- 1.0 degree
Pitch & roll	+/- 1.0 degree
Altitude (optional)	+/- 0.025%
Depth	+/- 0.01%
Water ingress	
Low oil alarm	
Hydraulic temperature	
Hydraulic pressure	
Line insulation monitoring	
Vehicle turns	
Telemetry status panel	

Manipulators

Right-hand	
- standard	Schilling Conan 7P
- optional	Schilling Titan 3 Schilling Orion 7P
Left-hand	
- standard	Schilling Rigmaster 5F Grabber
- optional	Schilling Conan 7R Schilling Orion 7R

Vehicle Control System

Data transfer by multiplexer on twisted pair. Time division multiplexer, comprising of 24 analogue and 8 digital channels in both directions

Resolution	12-bit
Data rate	50Hz
Update rate of 32 times per second each channel	

Gyro Compass System

- standard	Bendix King KSG105 Accuracy: Two Deg
- option	True North Seeking Gyro

Location System

Various sonar system options
Transponder/ responder

Optional Tether Management System (TMS)

Perry
Top-hat Design

Height	2080mm
Diameter	1830mm
Weight in Air	2200kg
Tether capacity	200m

Slingsby
Top-hat Design

Height	2100mm
Diameter	2000mm
Weight in Air	2300kg
Tether capacity	250m-300m

Electrical Supply Requirements

Three phase	440-480Vac 60Hz
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