

Highly versatile modular 4000m Work class vehicle for underwater intervention, maintenance & survey

The UHD 4000, a next generation Ultraheavy-Duty ROV

5th generation new deep water vehicle, with 4000 metres depth capacity developed by Schilling Robotics for Bourbon Subsea Services.

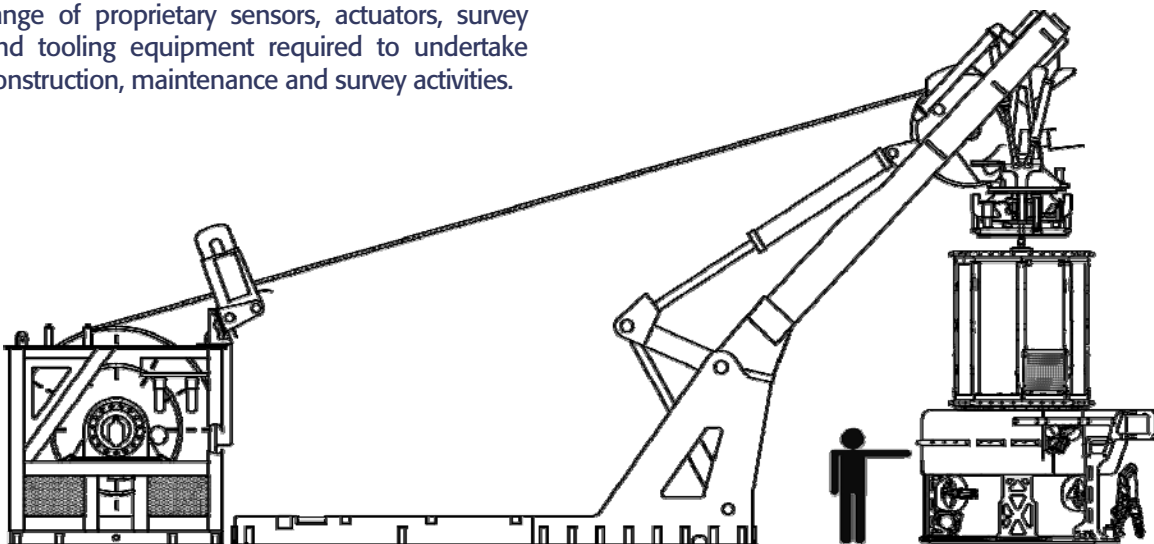


- Powerful high thrust vehicle propelled by 7 Sub-Atlantic thrusters producing 1000 kg of vertical bollard pull, driven by a 200HP Sub-Atlantic electro hydraulic power back.
- Designed and tested for 5000 kg through frame capability at 3G enabling it to handle significantly large items.
- Compatible with many industry peripherals and telemetry standards and support a broad range of proprietary sensors, actuators, survey and tooling equipment required to undertake construction, maintenance and survey activities.

- Detailed ergonomic design coupled with modular expansion has shaped the layout of the Control Cabin and console comprising, ROV control, video processing, navigation, power distribution, peripheral sensor and actuator controls such as the 5 and 7 functions manipulators and intervention tooling.



- A "Top Hat" TMS as standard to extend its weather threshold and is launched by a 4.5m reach LARS "A-frame" launch and recovery system.



UHD 4000

VEHICLE TECHNICAL SPECIFICATION

Depth rating:.....4 000 msw
Forward thrust:.....1 100 kg bollard pull
Lateral thrust:.....1 000 kg bollard pull
Vertical thrust:.....1 000 kg bollard pull
Propulsion comprises of 7 Sub-Atlantic thrusters units

- 4x17" SA429-60 vectored
- 3x17" SA429-60 vertical

Speed: 3kts horizontal and 2 kts vertical

VEHICLE FRAME

Height :.....1.98 m
Width:.....1.86 m
Length:.....3 m
Lift point SWL:.....5 T
Through frame lift:3.0 T

INTERNAL PAYLOAD CAPABILITY

250 kg payload over standard ROV fit (inc 2 manipulators) plus additional buoyancy as required.

EXTERNAL PAYLOAD CAPABILITY

Underslung:.....3000 kg
Rear:.....250 kg
Side:.....250 kg
Front:.....250 kg

MANIPULATORS

5 functions Schilling Rigmaster 2 (port)
7 functions Schilling T4 (starboard)

HYDRAULIC SYSTEM

1 x 200 Shaft HP electric motor
Single hydraulic pump Sub-Atlantic
Hydraulic system (8 ways TCU for thruster / ancillary equipment)
12x Solenoid valves for manipulators tooling, variable pressure and flow

TELEMETRY SYSTEM

Digital Telemetry System™ features a Gigabit Ethernet backbone and accommodates serial video, and Ethernet communications.
Data Channels: 8x RS232, 4x RS422/485, 4x Ethernet
Single Mode Fibre Optic system (3 for the Vehicle, 3 for the TMS)

NAVIGATION

Sonar Tritech Dual Frequency Obstacle Avoidance Sonar
1 Light Control Unit up to 12 x 120VAC, 250W dimmable lights

VIDEO EQUIPMENT

1 Monochrome, SIT camera pan & tilt
1 near SIT camera
1 high definition colour pan & tilt zoom camera
1 mini colour fixed focus TMS
1 colour zoom pan & tilt CCD camera TMS
1 T4 Wrist camera
Up to 8 cameras simultaneously (4 with focus and zoom control)
1 16x16 Video Switcher Matrix with 2 DVDs recorders integrated
1 VIGRA 3 channels Video
Overlay system
1 Light Control unit up to 12x120 VAC, 250W dimmable lights

SENSORS

Inertial Navigation IXEA and Fibre Optic Gyro Phins - Auto Heading $\pm 1^\circ$
Konsberg Simrad MS1007 Altimeter - Auto Altitude ± 0.15 m
Digiquartz Precision Depth Sensor Paroscientific 7000m - Auto Depth ± 0.15 m
Teledyne RD Instruments Workhorse Navigation Doppler Velocity Log - StationKeep™ ± 0.3 m
Sonar Tritech Dual Frequency Obstacle Avoidance Sonar
AutoTrack™ utility allows survey coordinates to control vehicle movement
Transponder on Responder mode

LAUNCH AND RECOVERY SYSTEM "A FRAME"

Reach: 5m, Snubber: 22T SWL @ 3G
L: 7.55m, W: 3.65m, H: 3.20m, Weight: 20T

UMBILICAL WINCH

12T SWL outer wrap, 123kNm Torque, 4400m max.
L: 4.05m, W: 3.15m, H: 3.5m, Weight: 46.2T

CONTROL CABIN

20' Control Cabin NON zone rated DNV 2.7-1-A60 certified

WORKSHOP CONTAINER

20' Workshop and spare parts container

ELECTRICAL REQUIREMENTS

420-460V, 3 phases @ 60Hz
ROV HPU Power & Control: 200kVA
TMS Power & Control: 30kVA
Power & Control: 16kVA

TETHER MANAGEMENT SYSTEM

Top Hat TMS - Schilling Robotics XE™ (Extended Excursion) Tether Management System
Tether (35mm dia) - 425m rated to 4000m
Tether Counter, Camera and Lightning system on plan & Tilt unit,
Depth sensor

All particulars believed to be correct but not guaranteed

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