

HARDSUIT™ QUANTUM

PHYSICAL

Depth Capacity:

1200 FSW (365m) – Q1200

2000 FSW (610m) – Q2000

Height

81.2 in (206cm) – adjustable to
fit operator 5'2"– 6'6" (157 cm –199 cm)

Width

44 in (112 cm) – Q1200

48 in (122 cm) – Q2000

Hull Material

A356 Cast Aluminum – Q1200

6061 T651 Forged Al – Q2000



PROPULSION SYSTEM

Power

4 x 2.4 HP (1.8 kw) each
DC Brushless - variable speed
214 lb (97 kg) vertical thrust
219 lb (99 kg) horizontal thrust

Control

Foot Controls
Left Foot – vertical control
Right Foot – lateral control

COMMUNICATION

Hard wire

Digital voice over data

Thru water

8 or 27 kHz acoustic

Life Support

- Oxygen re-circulation with fan powered CO2 scrubbing capability
- Back-up oral/nasal lung powered scrubber
- Dual independent Oxygen systems – port and starboard

Safety / Emergency Equipment

- Thruster Jettison capability
- Tether Cut / Jettison Capability
- VHF Radio direction finder
- 37.5 kHz pinger

Surface Monitoring & Control

- AMS (Atmospheric Monitoring System)
- Provides surface monitoring and recording of:
 - o HPO2 supply
 - o CO2%
 - o Cabin Pressure
 - o Depth
 - o Temperature
 - o System status and built in test
 - o Software based adjustment and switching

Navigation Equipment

- High resolution Pan, Tilt, Zoom, Focus video camera
- Digital compass with tilt sensor and turns counter
- Depth
- Acoustic tracking beacon (option)
- Color imaging sonar Altimeter (option)

Life Support Duration

- 6-8 hrs normal dive time
- 30 to 40 hrs reserve

Sensor and Tooling Interface

- Data interface in expansion can for:
 - o CP, UT, additional video, ACFM,
 - o Digital stills camera, 2nd video camera and ther tools and sensors

Tool Packages

Quantum uses standard tools modified for ADS interface:

- Hydraulic tools – impact, drill, chipper, concrete breaker, chop saw and other standard diver tools
- Flange connection tools – standard bolt tension, pull in and alignment systems
- Rigging and lifting
- Torque tools
- Sub sea HPU
- Dredge and jetting systems
- Hot stabs, gasket carriers
- Custom tools and adapters

Launch & Recovery System

Configurations to suit operation including:

Surface tended, crane based, full A-frame and TMS, fly away configuration, built in and custom configurations