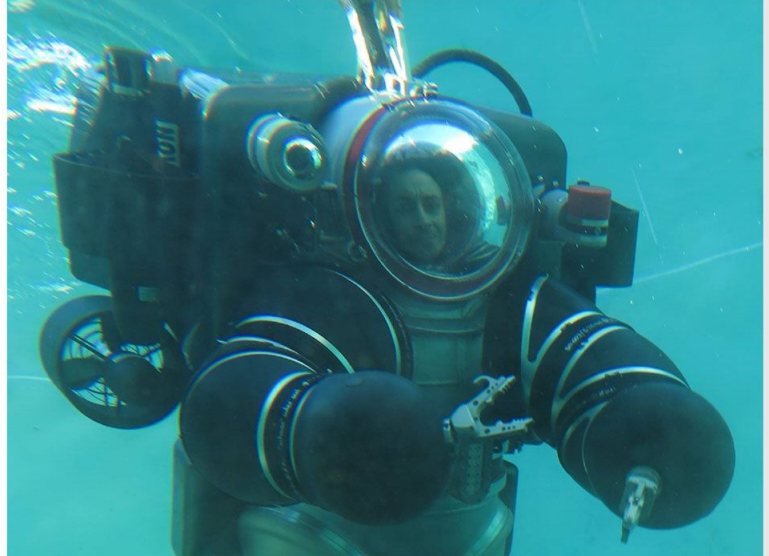
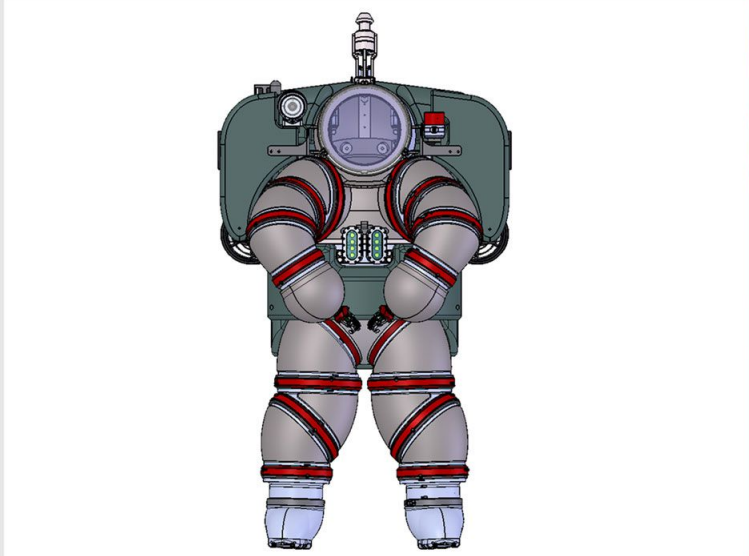




Nuytco 'Ironsuit'

Atmospheric Diving Suit

Nuytco 'Ironsuit' Specifications



GENERAL

- 610 m depth rated
- Upper and lower torso: HY 80 alloy steel
- Arm and leg spacers: machined billet
- Weight: 680 kg with pilot
- Larger handpod for ease of work (more interior space, extra buoyancy to reduce arm fatigue)

LIFE SUPPORT

- 2 Redundant oxygen systems, total capacity 50 hours
- 50 hour Carbon Dioxide scrubber
 - Back up battery with automatic change over on power failure
 - Lung powered scrubber back-up

PROPULSION

- 4 x 2.2 kW thrusters
- Direct drive, magnetically coupled thrusters
 - Quiet operation
 - Responsive (quick windup)

TELEMETRY / CONTROL SYSTEM

- Distributed control system (Omron PLC) allows for uninterrupted operation in case of telemetry failure
- Gigabit Ethernet over Fiber optic
 - Network attached high-definition camera
 - Network attached Imagenex 852 SONAR
 - Easy integration of IP and POE (Power Over Ethernet) devices
- Remote (topside) control of: thrusters, thruster trim, lights and tooling - Lightens pilot workload
- AMS (Atmospheric Monitoring System)
 - Real time monitoring topside of cabin pressure and Oxygen %
 - Lightens pilot workload
 - Enhances safety

UMBILICAL

- 750 m long nominal
- OD 24.5 mm nominal
- Minimum bend radius 685 mm
- Breaking strength 3265 kg
- Neutrally buoyant

COMMUNICATION

- Full duplex intercom – over copper
 - 6 intercom stations (pilot +5)
 - Highly reliable
 - No subsea power required
 - Excellent voice quality (low noise)
 - Aux In and Out jacks (topside)
- IP intercom out
 - Allows audio to be recorded synchronously with project video
- Acoustic thru water communications
 - Backup in case of hardwire communications failure
 - Compatible with communications hardware used commonly by manned submersibles

POWER REQUIREMENT

- 208-240 3 phase, 50 A, 50-60 HZ

EMERGENCY EQUIPMENT

- Umbilical jettison capability
- Thruster jettison capability
- Emergency battery
 - Powers thru water communications, O2 analyzer and Carbon Dioxide scrubber

ANCILLARY EQUIPMENT

- HD camera, H.264 (Blu-Ray Codec) camera
- 360 network camera (fisheye overview with 180° view)
- SONAR
 - Imagenex miniature 852 scanning sonar
- Newtsun LED Lights
 - 2 x 100 W LED lights
 - 9,600 lumens (each)
- For comparison - a 250W quartz lamp produces 3,500 lumens
 - 4500° K (cool white)

Equipment Specification May Change Due to Client's Requirements.
Date Last Updated: 17 October 2021



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