Atmospheric Diving System (ADS)

**HARDSUIT™ 1200**

The HARDSUIT™ Atmospheric Diving System (ADS), owned and operated by Phoenix International, is an advanced technological approach to diving services for applications that benefit from having a manned presence at the underwater worksite. Depth rated to 1,200 fsw, this one-man, one-atmosphere suit has proven to be a valuable tool within the commercial diving industry, offering Phoenix clients reduced overall project time, cost, and risk.

**Commercial Applications**

The compact size, joint flexibility, and hand pod dexterity of the HARDSUIT™, coupled with its ability to use a variety of conventional diver tools and equipment, give the system practical work capabilities for Phoenix clients worldwide including:

- Construction
- Inspection, Maintenance & Repair (IMR)
- Salvage & Recovery

**The HARDSUIT™ Advantage**

All ADS team members are trained to internationally recognized standards. The HARDSUIT™ systems and support equipment are designed with multiple safety backups including constant computer monitoring of life support parameters during each dive.

The suit provides the following operational advantages:

- Ability to maneuver in any position
- Accessibility to confined spaces due to compact size
- Longer working times (typical dive is 4 to 6 hours) without decompression
- Rapid mobilization capability
- Minimal shipboard deck space requirements
- Smaller crew sizes vs. conventional diving

**Contact us to learn more**

www.phnx-international.com

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Bayou Vista, LA | Ft. Lauderdale, FL | Houston, TX | Largo, MD
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### General
- **Maximum Operating Depth**: 1,200 ft (365 m)
- **Weight in Air**: 900 lbs (408 kg) dry
- **Weight in Water**: 4-5 lbs (1-2 kg) in flying mode
- **Dimensions**:
  - Height: 81.2 in (206 cm)
  - Adjustable to operators 62-75 in tall: (158-190 cm tall)
  - Width: 44 in (112 cm)
- **Hull Material**: A356 cast aluminum

### ADS Description
- **Propulsion**: 2 x 2.25 hp - 400 Hz
- **Motion Control**:
  - Left foot - Vertical control
  - Right foot - Lateral control
- **Communications**:
  - Hard wire - Digital voice over data
  - Through water - 27 kHz acoustic
- **Life Support**:
  - Air re-circulation, automatic
  - Oxygen make up with fan powered CO₂ scrubbing capability
  - Back-up oral/nasal lung powered CO₂ scrubber
  - Dual, independent oxygen systems (port and starboard)
- **Life Support Duration**: 6 hour typical dive time with 42 hour maximum emergency life support

### Life Support
- **Color Video Camera**: Pan and tilt
- NDT Sensors (optional) UT, CP, flooded member, etc.
- Hydraulic Tool Power Pack (optional) Grinders, cutters, impact wrenches, hot stabs, pumps, etc.
- **Water Blasting**: 20,000 psi

### Safety/Emergency Equipment
- **Atmospheric Monitoring System**: Surface monitoring for O₂, depth, temperature, and cabin pressure
- **Ballast Jettison Capability**
- **Thruster (Propulsor) Jettison Capability**
- **Tether Cut/Jettison Capability**
- **Radio Frequency Beacon/Xenon Strobe**
- **Emergency 37.5 kHz Pinger**

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