

WASP ATMOSPHERIC DIVING SYSTEM

Oceaneering International, Inc. can perform underwater intervention tasks at any working depth. We offer surface supplied diving to 300 ft, saturation diving to 1,000 ft, WASP Atmospheric Diving Systems (ADS) to 2,300 ft, or remotely operated vehicle (ROV) technologies to 25,000 ft. Experienced offshore personnel will first evaluate your workscope and then recommend the most effective solution for your application. When specified, the WASP Atmospheric Diving System (ADS) offers distinct advantages for intervention work, such as:

Presence – WASP puts the creative problem-solving abilities of veteran divers directly at the subsea worksite.

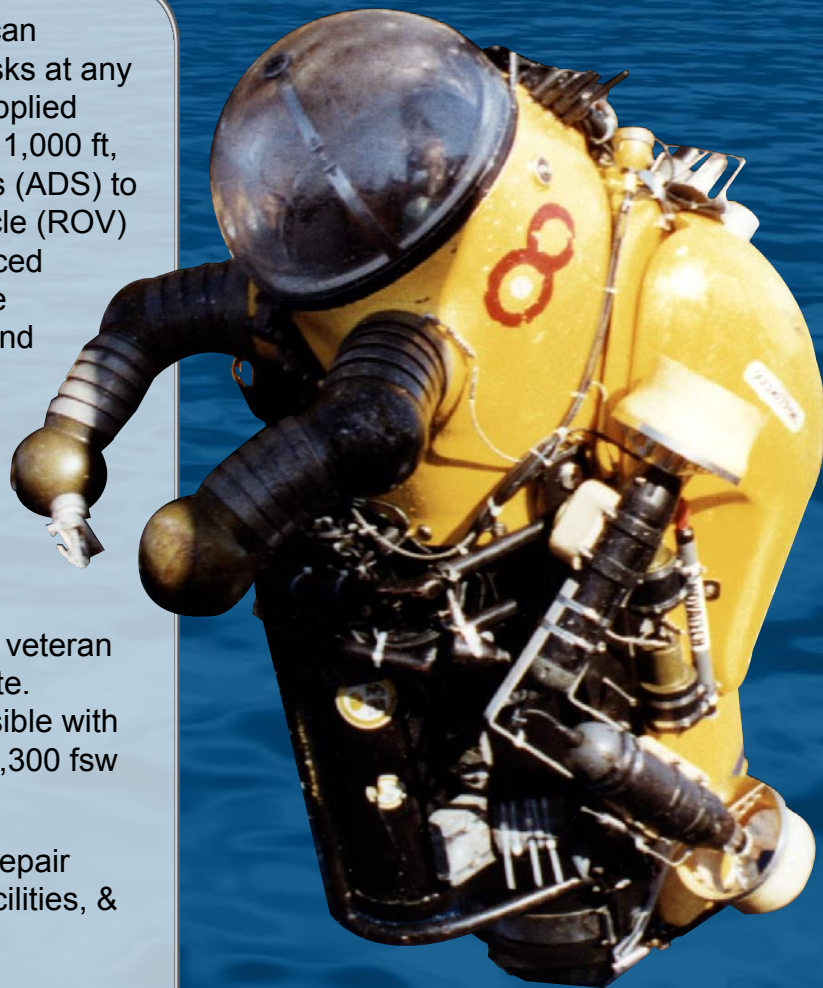
Versatility - A one-man submersible with unique intervention capabilities to 2,300 fsw

WASP workscopes include:

- Inspection, Maintenance and Repair Tasks of Platforms, Subsea Facilities, & Pipelines
- Riser & Pull Tube Installation
- Subsea Tree Installations
- Subsea Tree Intervention

Training - Maintaining an onsite training pool realistically prepares operators for a variety of common underwater tasks.

Compact Size – The WASP system is the smallest, high capacity intervention method available. The one atmosphere environment offers flexibility, efficiency, value and dexterity.



Principle Dimensions

Overall Height:		84 in
Width – Front:		42 in
Width – Side:		32 in
Weight with Operator:	In air	2200 lbs
	In Water	Neutrally Buoyant (with in-water adjustment)
Deck Wasp Support Frame:		66 in X 70 in

Standard Weights and Dimensions

	Len.	Width	Height	Weight
Hiab Sea Crane	8 ft	5 ft	10 ft	9,000 lbs
Electro/Hydraulic series 4 winch	10 ft	8 ft	8 ft	23,000 lbs
WASP	7 ft	8 ft	8 ft	2,000 lbs
Gas Quad O/2	10 ft	8 ft	8 ft	2,400 lbs
Gas Quad Air	10 ft	8 ft	8 ft	2,400 lbs
Control Van	16 ft	8 ft	8 ft	11,000 lbs
Control Workshop	16 ft	8 ft	8 ft	15,000 lbs
Spares Container	10 ft	8 ft	8 ft	2,400 lbs

Life Support / Safety Systems

Oxygen re-circulation with power scrubber, with manual back-up

Life Support Duration: Up to 72 hours

Safety Emergency Equipment:

- Flashing Beacon
- Oral / Nasal mask for Life Support system in event of power failure
- Tracker/ Locator Pinger
- Ballast Jettison for Emergency Ascent
- Emergency on board battery supply for 20 minutes at half power
- Lifting cable jettison facility

Hull

- Hull Material: Laminated glass reinforced plastic, (GPR) and aluminum
- Hemispherical dome: 360° view capability
- Lloyd's certified Depth Rating: 2,300 ft
- Buoyancy: Compressed air variable system from neutral to + 35 lbs

Communications (Audio Systems)

- Wire line Through-Water
- VHF Radio Communications on surface

Limbs / Manipulators

- Aluminum construction fully articulated, fluid-supported flexible arms with direct acting manipulators.

Deployment Systems

- Umbilical comprises a 22 mm diameter cable having a breaking strength of 32,000 lbs: fed from a single drum, two speed, fail-safe hydraulic winch; powered by a remote 75 hp electric-motor-driven hydraulic power pack
- Articulated Sea Crane

Power

Umbilical supply is 415 V AC. This is converted and rectified at the ADS to:

- 40 V, 60 V and 80 V for thrusters
- 12 V, 24 V and 30 V for other services

Propulsion

- Four Electrical Thrusters:
- 2 Vertical
- 2 Horizontal
- Foot Switch Operated

Video Systems

- Monochrome or CCD Color Camera
- Compatible with silicon intensified target (SIT)
- camera systems

