



# ADS Newtsuit



The **Newtsuit 1000** is a lightweight atmospheric diving system (ADS) designed as a safe and full capability alternative to costly and high diver-risk deep 'bounce' or 'saturation' diving methods. Invented and patented by Nuytco Research Ltd's Dr. Phil Nuytten, the **Newtsuit** allows the pilot/operator access to worksites deeper than can be worked by a conventional commercial diver, while exceeding the capabilities of access and 'hand' function of even the most sophisticated ROVs. The **Newtsuit** is a fully proven design that has been in use worldwide for nearly twenty-five years in support of military and commercial undersea operations. Nuytco Research operates the Newtsuit on an operational basis, in concert with other one-atmosphere assets.

The pilot/operator of the **Newtsuit ADS** remains at one atmosphere and is protected from the outside water pressure at depths up to one thousand feet. There is no requirement for any decompression. No decompression means that the pilot/operator completely avoids the physiological risks associated with deep ambient pressure or saturation diving and the end-user avoids the long, risky and costly decompression of saturation diving. With the pilot/operator remaining at one atmosphere, the **Newtsuit** has the same type of range and even greater mid-water maneuverability than a full work-class ROV spread. Unlike the ROV systems, the **Newtsuit** has the advantage of being small enough to have access to restricted spaces and has the ability to perform intricate tasks that were formerly the exclusive domain of commercial divers.

## ADS Newtsuit Specifications

### General:

- 1000 foot (300m) depth-rated
- 1 Pilot
- Dimensions H 81", W44", D33"
- Weight in air: 850lbs
- Payload: 250lbs
- Max Speed: 1.25 knots

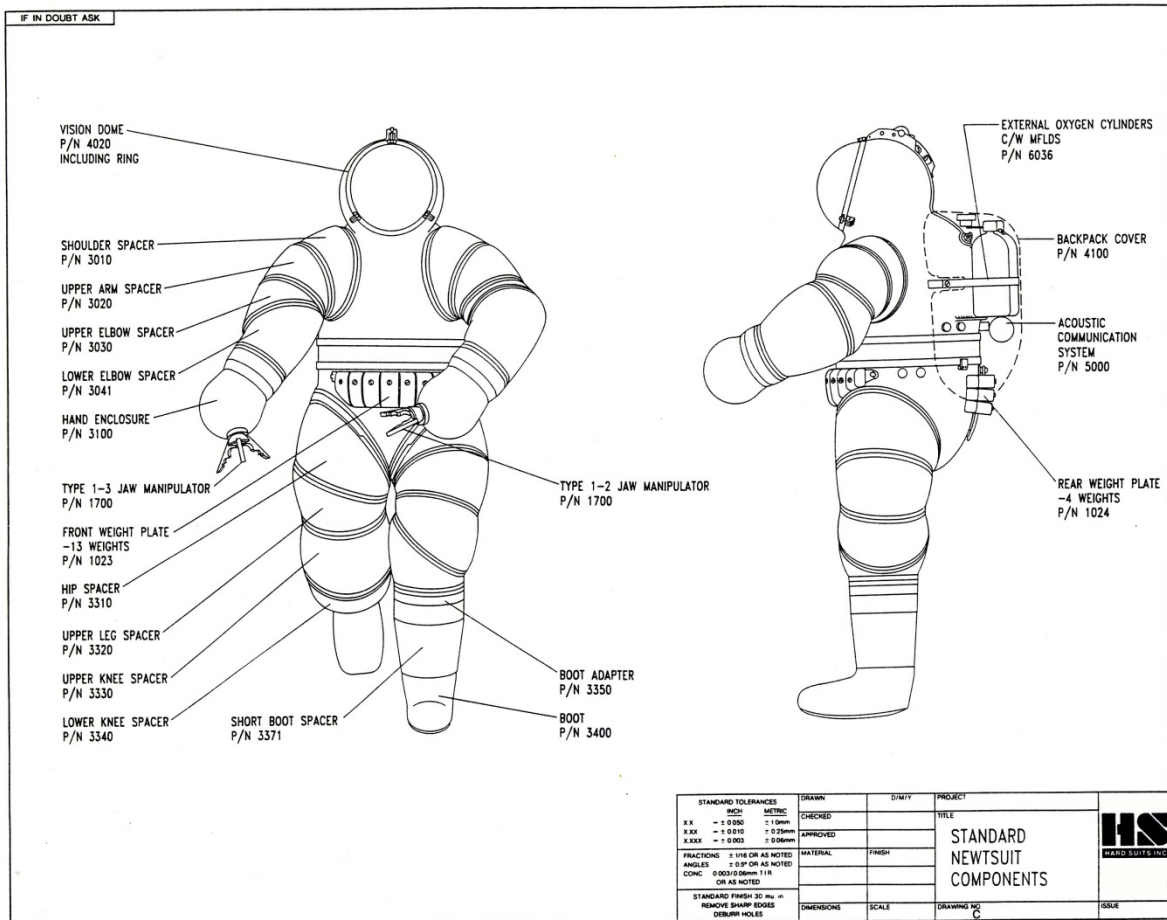
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NOTE: HARDSUITS INC. IS A WHOLLY-OWNED SUBSIDIARY OF NUYTCO RESEARCH

## Life Support:

- Redundant oxygen systems, total capacity 56 man- hours
- Carbon dioxide removed via scrubbers
- Emergency breathing gas via air BIBS

## Viewing:

- 12" dia. acrylic dome

## Communications:

- Surface- ADS: Hardwire comms
- Sub-surface: UQC and 27 KHZ Acoustic

## Propulsion:

- Optional backpack with two main horizontal thrusters, plus two vertical thrusters

## Emergency Equipment:

- Drop weight jettison capability
- Thruster jettison capability
- Emergency battery (for comms and CO2 scrubber)

## Power:

- 5 KVA- 200V – surface supplied

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