

SCUBA DIVING



ETYMOLOGY

THE TERM "SCUBA" (AN ACRONYM FOR "SELF-CONTAINED UNDERWATER BREATHING APPARATUS") ORIGINALLY REFERRED TO UNITED STATES COMBAT FROGMEN'S OXYGEN REBREATHERS, DEVELOPED DURING WORLD WAR II BY CHRISTIAN J. LAMBERTSEN FOR UNDERWATER WARFARE.



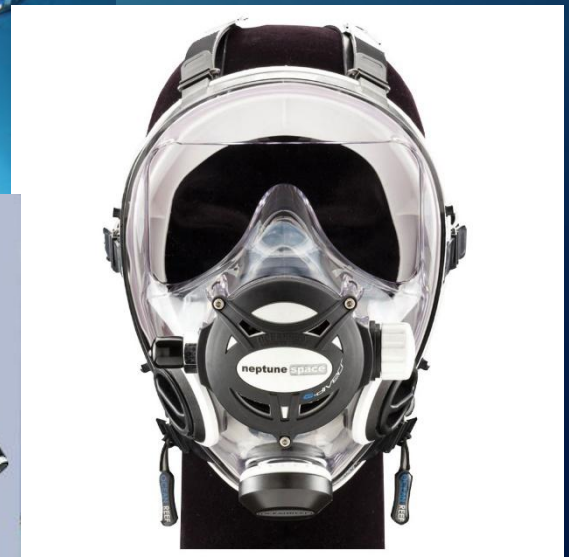
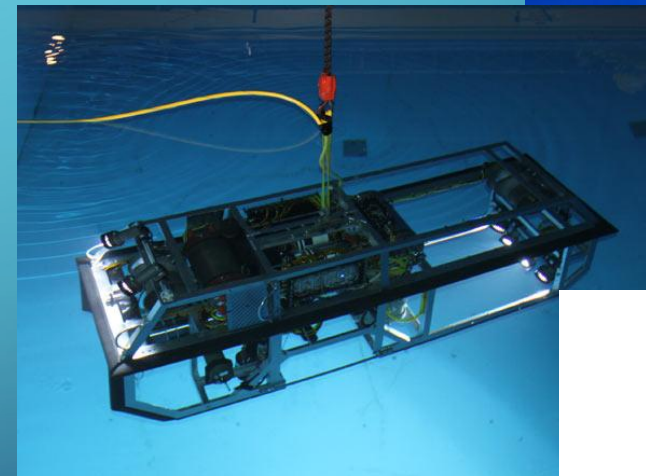
DEFINITION



A FORM OF UNDERWATER DIVING WHERE THE DIVER USES A SELF-CONTAINED UNDERWATER BREATHING APPARATUS (SCUBA) WHICH IS COMPLETELY INDEPENDENT OF SURFACE SUPPLY, TO BREATHE UNDERWATER.

EQUIPMENT

- FINS
- DIVER PROPULSION VEHICLE (UNDERWATER SCOOTER)
- SLED
- MASK
- EXPOSURE PROTECTION (DIVING SUIT)
- EQUIPMENT TO INCREASE VISIBILITY
- SNORKEL
- OTHER

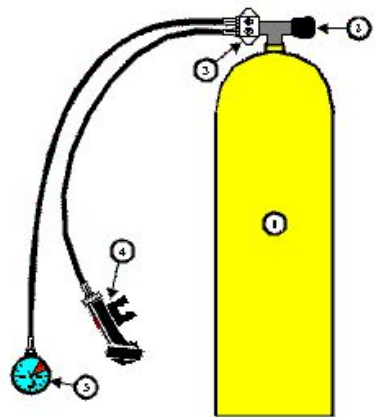


TYPES OF DIVING EQUIPMENT (CIRCUITS)

Open Circuit

Closed Circuit
(rebreathers)

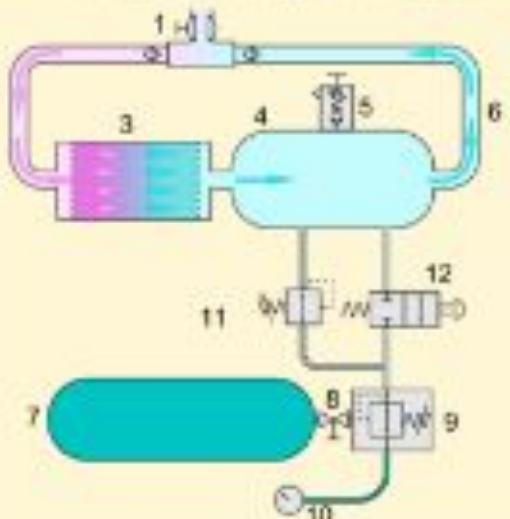
Open-circuit Scuba



- (1) Gas Supply Cylinder
- (2) On/Off Valve
- (3) First-Stage Regulator
- (4) Second-Stage Regulator
- (5) Pressure Gauge



Closed Circuit Oxygen Rebreather



FROGMEN

- A frogman is someone who is trained in scuba diving or swimming underwater in a tactical capacity that includes police or military work.



SCUBA DIVING



Recreational



Professional



DEEP DIVING

- It's an underwater diving to a depth beyond the norm accepted by the associated community.



DEPTH

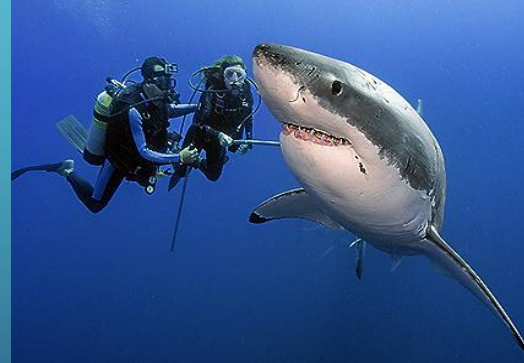
Depth ranges in underwater diving [edit]

| Depth ^[nb 1] | Comments |
|-------------------------|--|
| 12 metres (39 ft) | Recreational diving limit for divers aged under 12 years old and EN 14153-1 / ISO 24801-1 level 1 (Supervised Diver) standard. ^[5] |
| 18 metres (59 ft) | Recreational diving limit for divers with PADI Open Water certification but without greater training and experience. ^[citation needed] |
| 20 metres (66 ft) | Recreational diving limit for EN 14153-2 / ISO 24801-2 level 2 "Autonomous Diver" standard. ^[6] |
| 30 metres (98 ft) | Recommended recreational diving limit for PADI divers. ^[1] Average depth at which nitrogen narcosis symptoms begin to be noticeable in adults. |
| 40 metres (130 ft) | Depth limit for divers specified by Recreational Scuba Training Council. ^[1] Depth limit for a French level 2 diver accompanied by an instructor (level 4 diver), breathing air. ^[citation needed] |
| 50 metres (160 ft) | Depth limit for divers breathing air specified by the British Sub-Aqua Club and Sub-Aqua Association. ^[7] |
| 55 metres (180 ft) | Depth at which breathing air exposes the diver to an oxygen partial pressure of 1.4 bar. |
| 60 metres (200 ft) | Depth limit for a group of 2 to 3 French Level 3 recreational divers, breathing air. ^[8] |
| 66 metres (217 ft) | Depth at which breathing compressed air exposes the diver to an oxygen partial pressure of 1.6 bar. Greater depth is considered to expose the diver to an unacceptable risk of oxygen toxicity. ^[nb 2] |
| 100 metres (330 ft) | One of the recommended technical diving limits. Maximum depth authorised for divers who have completed Trimix Diver certification with IANTD ^[9] or Advanced Trimix Diver certification with TDI. ^[10] |
| 120 metres (390 ft) | Maurice Fargues was a volunteer in a programme to determine the maximum depth a scuba diver could reach with compressed air. He became the first diver to perish using scuba. ^{[11][12]} |
| 155 metres (509 ft) | Record depth claimed, but not officially recognised, for scuba dive on compressed air. ^[13] |
| 200 metres (660 ft) | Limit for surface light penetration sufficient for plant growth in clear water, though some visibility may be possible farther down. ^[nb 3] |
| 332 metres (1,089 ft) | World record for deepest dive on SCUBA. ^[14] |
| 534 metres (1,752 ft) | Comex Hydra 8 experimental dives. (1988) ^[4] |
| 610 metres (2,000 ft) | US Navy diver in Atmospheric Diving System (ADS) suit. ^[15] |
| 701 metres (2,300 ft) | Comex Hydra X (Hydra 10) simulated dive in an onshore hyperbaric chamber by Theo Mavrostomos on 20 November 1992. ^{[16][17][18]} |

Активация Windows
Чтобы активировать Windows, перейдите в раздел "Параметры".

HAZARDS

- Changes in pressure
- Decompression sickness
- Nitrogen narcosis
- Oxygen toxicity
- Failure of diving equipment
- The diving environment
- Becoming lost or disoriented (in caves or wrecks)
- Loss of body heat
- Injuries due to contact with the solid surroundings
- Dangerous marine animals
- Pre-existing physiological and psychological conditions in the diver
- Diver behaviour and competence



RISKS

- Decompression sickness and arterial gas embolism in recreational diving are associated with certain demographic, environmental, and dive style factors. A statistical study published in 2005 tested potential risk factors: age, gender, body mass index, smoking, asthma, diabetes, cardiovascular disease, previous decompression illness, years since certification, dives in last year, number of diving days, number of dives in a repetitive series, last dive depth, nitrox use, and drysuit use. No significant associations with decompression sickness or arterial gas embolism were found for asthma, diabetes, cardiovascular disease, smoking, or body mass index. Increased depth, previous DCI and days diving were associated with higher risk for decompression sickness and arterial gas embolism. Nitrox and drysuit use, greater frequency of diving in the past year, increasing age, and years since certification were associated with lower risk, possibly as indicators of more extensive training and experience

TRAININGS AND CERTIFICATION

PADI (PROFESSIONAL ASSOCIATION OF DIVING INSTRUCTORS)



PADI®

- PADI – the leading training agency for scuba diving in the world.
- membership - over 136,000 individuals
- 6,300 dive centers,
- More than 25,000,000 diving certifications internationally.
- growth of 1.1% in female certifications; women accounted for 37.2% of all certifications

BUDDY, TEAM OR SOLO DIVING



BEST PLACES TO
SCUBA DIVE
AROUND THE WORLD

