



Advanced Nitrox & Decompression Procedures



Overview

This course examines the theory, methods and procedures of decompression diving. The objective is to train divers in the use of twinsets and stage cylinders to conduct dives to a maximum depth of 45m using Nitrox mixtures up to and including Oxygen for decompression. Equipment set up, dive planning, decompression techniques and underwater skills are all covered during the program. The course costs £450 each for 2 divers or £630 1 to 1.

Student Pre-Requisites

The student must:

- Be a minimum age of 18.
- Have a minimum certification of Advanced Open Water Diver or equivalent.
- Have a Basic Nitrox qualification.
- Show proof of at least 25 logged open water dives.

Equipment

The following equipment is required for each student in addition to their normal Scuba set up. Students can hire equipment from 3D Diving.

- Manifolded or independent twinset, O2 clean
- 7 lt stage / deco cylinder O2 clean
- Primary and secondary regulators for the twinset
- Deco regulator
- 2 timing devices / Nitrox computers
- Slate and pencil
- Reel and DSMB
- Wing style BC

Subject Areas

The PSA Advanced Nitrox & Decompression Procedures Manual is provided for this course. The following topics are covered:

- History of Nitrox and decompression diving.
- Physical principles of Nitrox and decompression diving.
- Physiology of Nitrox and decompression diving.
- Decompression options.
- Equipment considerations.
- Dive tables, dive computers and decompression software.
- Dive planning.
- Methods of generating Nitrox.
- Using Nitrox & Oxygen.

In order to complete this course, students must satisfactorily complete the PSA Advanced Nitrox & Decompression Procedures written examination.

Skill Performance Requirements

The following open water skills must be completed by the student during open water dives safely and efficiently:

- Demonstrate adequate pre-dive planning.
- Conduct the planned dives within all pre-determined limits.
- Problem solving underwater .
- Perform all simulated and actual decompression stops with gas switches whenever and wherever mandated.
- Demonstrate the correct deployment of a delayed SMB.
- Demonstrate emergency deployment of a backup regulator to breathe bottom mix at a depth not exceeding 30 metres (shutdown procedures).