

INTRO TEC

(Advanced Deep Diver)

Intention of this course

This course contacts sport divers who want to dive safely, with extended equipment, at sport diving limits of 40 msw and beyond that to max. 50 msw.

Instruction by ProTec Intro Tec / Advanced Deep Diving Instructor.

Training environment

Any open water, safe for scuba diving. Recommended:

Walls with smooth falling off area at the desired depth range. The recommended max. depth by cold water is 45 msw and warm water / best conditions 50 meter. Either slope / wall or use safety line down to the bottom. No "Blue Water Diving".

Prerequisites

- Advanced diving skills, which should be proved to the instructor as well as
- Scuba Diver 2** certification
- Nitrox 2 Diver certification.

Accomplishment

The instructor may adapt the course program according to the local conditions.

Only the faultless accomplishment of one module of the course program permitted the advance to the next course module.

The instructor is required not to allow any inadmissibility concerning also the equipment.

Theoretical lessons

To repeat and check Scuba Diver 2

- Planning air consumption.
- Partial pressure.
- Nitrogen narcosis – effects / measures.
- Oxygen toxicity
- Nitrox skills

Overview

- Deep diving – what does this mean?
- Special problems when diving deep.
- Measures & control

Stress

- Stress & deep diving – effects /measures.
- Causes
- Symptoms
- Panic
- Control

Equipment

- Equipment (normal and extended).
- Redundancy (regulator).
- Regulator freezing up - counter measures.
- To determine BCD suitability and counter measures by negative buoyancy at greater depth.
- Cold insulation
- Reel & buoy

The Dive

- Advanced diving planning
- The diving plan
- To collect information
- To check the possibilities
- To set a goal / how to approach

- To calculate the factors
- Decompression
- Measures & emergency plans
- The Briefing (Where, when & how, concisely)
- Related discussions after the dive, debriefing
- Examination - variance comparison
- Exchange of experience
- Improvements

Practical lessons

This practical training is divided into two parts:

- Part 1- Dives with max depth of 40 meter and simulated deco- levels. No Nitrox use. The students can terminate this part and get “recreational” deep diving speciality certification (ProTec Deep Diver).
- Part 2 - Dives deeper than 40 meters (max. 50 msw) with EANx for deco – levels to reach the ADD course goal. The handling with deco line and buoy can be exercised but it is not a condition.

Equipment

Apart from/instead of the standard equipments the following items are to be used/carried with:

- 1 x 15 l or 1 x 18 l cylinder with 2 outlets or 2 x 10 l cylinder.
- 2 high- quality regulators (with freezing up protection if necessary).
- An octopus
- Primary light + position light if poor visibility / less light.
- Sufficient cold insulation = dry suit if temp. under 10° C.
- UW slate (multi – sheet for example; executive slate).

The diver should be able to handle all parts of the equipment UW without any assistance – even the valves.

Generally applies

- Max. Depth 50 msw, may be reduced due to situation
- Deco planning max. 10 minutes for deco steps. Normal air as diving gas.

- At 40 msw and deeper: Max. 2 divers per instructor. Rescue diver on surface and help are ready on land.

Theory part for each UW practise module

- Planning: To discuss the way by sketches, air management, to specify the tasks and positions of each particular diver, to check abort – emergency plan.
- Briefing: (short before the dive/in front of the place): To repeat the important points inclusively an equipment check.
- Debriefing: To recognize the mistakes and improvement possibilities, to revise them.

Quality requirements

- Best buoyancy: Sediment should not be whirled up and uncontrolled contact with environment should not be allowed.
- The divers should always completely control, consider, without sign of stress or Nitrogen anaesthesia, so to act with self-assurance.
- The permission to the next difficult course module can just be given after the positive termination of the module before.
- After a negative result, the diver should be sent to the surface or a break off should be made.
- At deep dives never cause intentionally emergency situations (for example; to turn off cylinder valves). Just simulate.
- Never simulate an emergency situation without prior arrangement (briefing).

Module 1

- Gear on; check buoyancy as well as operability and function.

Module 2

Check-up exercise at the depth of 10 meter:

- Sign language
- Simulated turn off of the valves (switch regulator) as freezing up exercise.
- To solve an arithmetical example on the UW slate (it should be very well solved in less than 1 minute on land)..
- Exercise use of a deco buoy (only at deco stop levels – not below 12 msw)

Module 3

- Maximum depth is 35 msw.
- To check the advanced and deep diving skills during descending.
- Stops to check at the depth of 25, 30 meter.

Module 4

- Maximum depth is 40 meter. No real deco stop necessary when ascending from 6 msw.
- Check –up exercise at the depth of 40.
- Deco exercise/simulation at 3 msw.

Module 5

- Maximum depth is 45 meter with check- up exercise.
- To solve arithmetical problem in max. Depth (allow max. 1 minute time).
- Decompression stops with additional +1 minute for extra safety

Modul 6

- Maximum depth is 50 meter with check- up exercise.
- To solve arithmetical problem in max. Depth (allow max. 1 minute time).
- Decompression stops with additional +1 minute for extra safety

Courseware

Visit ProTec members area for any material / price list.

- Checklist