

TEC WRECK DIVER

(Technical / Complete Wreck Diver)

Intention of this course

This course builds up the basic knowledge that is gained in the basic course (Intro wreck) and would be strengthened through the relative practice.

It offers further knowledge for the technical **wreck diver**. The goal is the preparation to dive in large ship wrecks where all the explored sections could be dived. This demands mastering difficult passages and narrow places. The situation in the wreck complies totally with the solo dives. The time limit required occasionally expanded decompression phases, which can be efficiently mastered with the appropriate technique (Nitrox & extended range course).

Instruction by ProTec Tec Wreck Instructor.

Course objects

Just ship wrecks with the following characteristics are suitable as training objects:

The wreck should have the minimum size (about 70 meter long), which permits the diving through several areas and decks under completely “overhead environment” situation. It should be largely intact and stable (steel ship). It should not lie too deep so that long stays are done safely (deco). It is recommended to use Nitrox (EANx).

Prerequisites

- ProTec Intro Wreck certification
- More than 30 wreck 1 dives to min. 10 different ship wrecks that lie deeper than 10 msw.

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.

Even if there is no need (while exercises in less depth) for the complete (heavy) equipment, dive training with the full equipment is essential during this course.

Deco – dives are allowed but should be avoided if possible.

Use of Nitrox is recommended.

Theoretical lessons

General Part

- To repeat and compare with the basic wreck knowledge.
- Short exchange of experience
- Shipbuilding in general
- Large structure of different ships' types
- Changes in wreck's status in course of time
 1. Differences to the individual ships' kinds
 2. Warship – trade ship, wood- steel..,
 3. Differences of regions: Warm- cold water
 4. Deep-flat lying (storms,...), currents
- Searching for a Wreck /procedure way
 1. Archives
 2. Stories, observations
 3. Echo-sounder, scanner
 4. Trail rope
 5. To determine and identify the position
- Maritime law
 1. Tasks of ships /wrecks
 2. Owner's right, seamanns graves
- The ProTec wreck diving program.

Class 1 - in front of the place / on the wreck

- Mark and secure the diving place
- Place deco lines and spare tanks
- Find the best place for getting in

- To outline the way, equipments, air supply, to choose and plan deco & team.

Class 2-3 - In the Wreck

- Movement in the wreck (To use fins or hands/fingers)
- Dangerous places and parts inside. (Sharp broken edges, cable, prominent parts, unstable surfaces, narrow places, stairs, and movable doors). Recognise, secure or bypass.
- Special movement through advanced technique without whirling up sediment.
- Orientation and safely diving in an advanced wreck diving area –to check the possibilities (reels, position lamps, sketches, dry exercises), to recognize dangerous estate and danger (explosive or chemical charges).

Class 4

- Wreck diving = solo diving, self - help is the only possibility in emergency, situation studies.
- To master silt - out situation, to prevent getting into a tangle, jamming or hooking and/or to solve problems without help.

Class 5

- To use main and spare lines, spring and gap reels, to solve difficult situations like the lost of orientation (for example; caused by poor visibility) physically and psychologically.
- Case studies.

Class 6-7

Previous discussing/planning the several training dives.

Practical lessons

Equipment:

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

- Tow independant double bottles – (50 bar) to be used as alternative.
- An octopus on about 2 m. long air - pressure hose.
- Apart from the primary light (Broad headlamp 50 Watt for min. 60 minutes), a spare lamp + position light.
- Thick neoprene hood or helmet.
- Spare knife (line cutter).
- Durable gloves
- Spare mask
- Writing board
- Guidance line (reel) for minimum 50 meter + spare (30 m) and spring line

The diver should be able to use all the equipments' articles together with the valves without any strange assistance.

Generally applies

- Max. penetration limit is free according to the possibility.
- The bottom time depends on deco.
- Max. 30 minutes deco planning.

1. Theory part for each UW practise module

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- Planning: To discuss the way with 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 inclusive 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 the dive 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 guided (Assi) to the surface or a break off should be made.
- At wreck dives never course intentionally emergency situations (for example; to turn off cylinder valves). Just simulate.
- Never simulate an emergency situation without prior arrangement (briefing).

Modul 1

Check the skills and the talents within an advanced wreck 1 diver.

(Buoyancy, equipments, procedure way).

Modul 2

- Correctly prepare the equipment and check them at a “dived wreck”.
- Draw to scale the wreck and determine the possible penetration entry points.

Modul 3

Explore the wreck and to check the danger spot of very difficult passages and prepare for them (in front of the place and by planning for the next dive).

Modul 4

- Penetrate further to deeper and difficult areas. To use advanced reel techniques.
- Simulate and exercise emergency cases.

Modul 5

Like module 4. To improve movement and timing, “to be hanged without silt – out”.

Courseware

Visit ProTec members area for any material / price list.

- Checklist

- Book: Complete Wreck Diving