

Recreational technical diving Centers Requirements and Standards

This certification scheme specifies minimum requirements to certify the conformity of the services of technical diving service providers.

Technical diving centers are legitimate MOT licensed diving centers that provide the following in addition to the regular recreational scuba services and has successfully obtained a Recreational Technical Diving service provider Certification (RTDSPC) from CDWS:

1. Teach technical diving courses.
2. Organize guided technical dives.
3. Blend and/or sell diving gas mixes such as: Nitrox, Trimix, Heliox and O₂ for diving.

Recreational Technical diving service providers must apply for a (RTDSPC) from CDWS and should comply with the Technical training agency standards and the following requirements.

Requirements:

Qualifications:

The operation must:

- 1- Have at least one permanent technical diving instructor on staff certified by a recognized training agency with at least 2 years experience as a technical diving instructor.
- 2- Use certified technical dive masters for underwater tours up to the same or higher level of the specified dive activity.
- 3- Have a trained and certified gas blender up to the dive activity level.
- 4- Oxygen and Helium analyzers.
- 5- Filling/blending station personnel must obtain a valid Gas Blender certification up to the dive activity level:
 - a- Gas blender certification if providing Air, Nitrox and O₂ blends only.
 - b- Advanced gas blender certification if providing Helium based mixes.

Notes:

- 1- The list of recognized Technical diving training agencies includes: NAUI Tec, TDI, IANTD, DSAT, GUE, ANDI, IART and BSAC.
- 2- Other training agency must apply and submit their training material and standards to the TC to be studied for approval.
- 3- The operator is to organize technical diving activities up to the level of the above mentioned technical diving instructor ONLY.

Equipment:

- 1- A gas blending station up to the level of the dive activity.
- 2- A minimum of 4 twin-sets, manifolded with isolator valve equipped with the proper carrying hardware.
- 3- A minimum of 8 O₂ cleaned stage tanks equipped with the proper carrying hardware.
- 4- A minimum of 2 rebreathers if teaching rebreather courses.
- 5- A minimum of 1 Oxygen analyzers if providing/selling Nitrox.
- 6- A minimum of 2 oxygen analyzers and 1 Helium analyzer if providing/selling Trimix or Heliox.
- 7- A minimum of 8 bottom mix balanced regulators.(diaphragm or piston type)
- 8- A minimum of 8 O₂ clean stage regulators.
- 9- A minimum of 2 dive computers and/or bottom timer.
- 10- Decompression Software like Deco Planner, GAP, V-Planner, etc...
- 11- A minimum of 4 dual bladders Tech BCD's of 20 lt. lift capacity per bladder or for DIR courses 4 single bladder of 20 lt. lift capacity and proper DIR harness.
- 12- A minimum of 8 Surface Marker Buoy (SMB) of different colors or marking.

General requirements:

The operator must:

- 1- keep the following records and documents:
 - a. Divers' registration, liability release and medical statement.
 - b. Tanks and gases' mixtures log.
 - c. Dives' plans log.
- 2- Have marking stickers and gases mixtures labels on the tanks.
- 3- Have the rules and regulations of technical diving activities clearly announced, including:
 - Local area rules, regulations and hazards.
 - Maximum depth allowed for each level.
 - Allowed and restricted/forbidden diving activities.
 - Any other rules set by the dive center or local regulations.

Operation standards:

The operator must:

1. Have at least one tank of O₂ on site during diving or training activities.
2. Have a surface support diver on site during dives deeper than 60 meters.
3. Follow the regulations set by the training agencies regarding depth and gas mixtures.
4. Mark clearly all deco tanks with the maximum operating depth (MOD) and the % of the gas mix.
5. Mark clearly the MOD, the gas mix and the name of the diver on the twin-set.
6. Use O₂ clean regulators and tanks for gases containing higher than 40 % O₂
7. Follow the instructor- student ratio set by the training agency.
8. Assure that for all decompression dives, each diver must be equipped with a minimum of 1 primary deco. SMB and 1 emergency SMB (Minimum of two).

Depth limitations for different activities:

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| - For Advanced enriched air the maximum depth is: | 40 meters |
| - For Decompression procedures dives (Or equivalent) the maximum depth is: | 45 meters |
| - For Extended range dives (or equivalent) the maximum depth is: | 55 meters |
| - For Normoxic (entry level) Trimix the maximum depth is: | 60 meters |
| - For Hypoxic (advanced) Trimix the maximum depth is: | 100 meters |

NOTE: for all technical diving activities; the maximum PPO₂ for Bottom mix is 1.4 ATA and the maximum PPO₂ for Decompression mix is 1.6 ATA

Warning: CDWS does NOT recommend nor support any recreational technical diving activities deeper than the above mentioned depths.

For any Technical dives deeper than the above mentioned depths – using open circuits or closed circuit rebreathers – the divers and the technical manager of the diving center are **fully responsible** for their activities, self and others safety.

By all means the following **must be prepared, reviewed and approved** by the Technical manager prior to the dive date:

1. Divers training qualifications.
2. Proof of diving experience.
3. The dive plan and the dive gas mixes.
4. The dive location.

5. Proof of support team's training qualifications.
6. List of emergency equipment available at the site and the emergency plan.
7. Proof of dive insurance covering the team to the planned maximum depth.

Notes:

1. **The Technical Dive is** any dive conducted using one or more of the following:
 - One, two or more than two gases or gas mixtures for decompression diving including: Air, Nitrox, Oxygen, Trimix & Heliox.
 - Closed circuit rebreather (CCR) for decompression diving.
 - Stage tanks for decompression purpose during open circuit or closed circuit diving.
2. The recommended equivalent narcotic depth (END) set by the CCR manufacturer must be followed for CCR dives.
3. The recommended maximum END for mixed gas (Trimix, heliox) open circuit dives is 40 MSW.
4. General:
 - Diving service providers meeting the above requirements may apply for Recreational Technical Diving Service Provider Certification (RTDSPC).
 - The methods of filling technical diving gas mixes can be Partial Pressure method, constant flow method or a combination of the two.
 - The operation may provide/sell any diving related items such as equipment, soda lime, etc.
 - Run time tables, slates or wet notes (normally owned by clients) may be provided by the operator.
 - The above mentioned standards and requirements **do not** apply for recreational Nitrox providers.
 - The (RTDSPC) is free of charge in 2009; starting 2010 the annual fee will be EGP 1000.