

TEC 45 TRAINING DIVE 1

Key Standards

Environment: Confined water or limited open water.

Maximum Depth: 10 metres/30 feet

Decompression: No Stop Only

Ratio: 6:1, 8:1 with one or more certified assistants

Skills

To successfully complete this training dive, students must be able to:

- 1) Working in a team, assemble and inspect the standardized technical diving rig (or sidemount) including a stage/deco cylinder following the previously described rigging philosophies and to meet individual/environmental needs.
- 2) Establish proper weighting for the standardized technical rig (or sidemount) and exposure suit as worn in the dive environment.
- 3) Independently don and remove a single deco cylinder at the surface.
- 4) Descend along a line to the bottom, maintaining control of depth and descent speed by adjusting buoyancy.
- 5) Working as a team, perform appropriate bubble checks and descent checks.
- 6) Swim not less than 18 meters/60 feet while sharing gas via long hose as the receiver.
- 7) Swim not less than 18 meters/60 feet while sharing gas via long hose as the donor.
- 8) As part of a team, properly stage and secure a deco cylinder on the bottom for later retrieval and use.
- 9) Perform the gas shutdown drill within 60 seconds (40 seconds in sidemount)
- 10) Tow a simulated unresponsive, breathing diver horizontally 6 meters/20 feet underwater.
- 11) As part of a team, retrieve and don a stage decompression cylinder.
- 12) As part of a team, simulate decompressing on high oxygen EANx/oxygen by ascending to shallower depth, NO TOX switching to simulated high oxygen EANx/oxygen and completing a stop of not less than five minutes, maintaining physical contact with the line, a wall or the bottom, as needed.
- 13) As part of a team, simulate a descent in rough or choppy conditions by descending to the bottom at a controlled rate in water too deep in which to stand, then conducting a bubble check, descent and an S-drill.
- 14) Perform a working rate SAC swim by swimming for approximately five minutes at a level depth, recording the appropriate information for later calculation.

- 15) In full technical equipment including stage/deco cylinder, demonstrate buoyancy control by establishing neutral buoyancy with the backup buoyancy system and hovering over the bottom for not less than one minute.
- 16) As a team, simulate a partially failed lift bag/DSMB from the bottom using the proper technique to avoid entanglement and maintain control of the bag/DSMB.
- 17) As a team, simulate a partially failed lift bag/DSMB by deploying a second lift bag/DSMB up the line of the first lift bag.
- 18) As a part of a team, use primarily proper buoyancy control to ascend along a line at a controlled rate not to exceed 10 metres/30 feet per minute, or slower if specified by a dive computer, and perform four simulate decompression stops for a total of not less than 18 minutes, remaining within .5 metres/1.5 feet of the required stops.
- 19) While neutrally buoyant at a simulate decompression stop, with a team mate, NO TOX gas switch to decompression cylinder while maintaining depth within 1 metre/3 feet of the stop depth.
- 20) While neutrally buoyant at a simulated decompression stop, perform the gas shutdown drill while maintaining depth within 1 metre/3 feet of the stop depth.
- 21) Record the appropriate information for later calculation of a deco SAC rate by recording gas use information during a series of simulated decompression stops.
- 22) Throughout the dive, demonstrate time/depth and gas supply awareness by writing the depth and time at each 35 bar/500psi/ or back gas consumed.
- 23) Demonstrate turn pressure and time limit awareness by signaling the instructor upon reaching the turn pressure or time limit the team has planned were this really a decompression dive.
- 24) Throughout the dive, respond appropriately to simulated emergencies prompted by the instructor.