

6. Sidemount Instructor

6.1 Introduction

This course is designed to train instructors to teach certified divers how to safely utilize side-mounted primary cylinders as an alternative to the traditional back-mounted configuration.

6.2 Qualifications of Graduates

Upon successful completion of the course, graduates may teach diving activities in a sidemount equipment configuration provided:

1. The diving activities approximate those of training
2. The areas of activities and environmental conditions approximate those of training

Graduates who are also nitrox instructors may enroll in:

1. TDI Advanced Nitrox Instructor course
2. TDI Decompression Procedures Instructor course

6.3 Who May Teach

This course may be taught by any active TDI Sidemount Diving Instructor Trainer.

6.4 Student to Instructor Ratio

Academic

1. Unlimited, so long as adequate facility, supplies and time are provided to ensure comprehensive and complete training of subject matter.

Confined Water (swimming pool-like conditions)

1. N/A

Open Water Dives

1. A maximum of 4 students per instructor trainer; it is the instructor trainer's discretion to reduce this number as conditions dictate

6.5 Student Prerequisites

1. Certified as an SDI Open Water Instructor or equivalent
2. Certified as a TDI Sidemount Diver or equivalent

6.6 Course Structure and Duration

Water Execution

1. Three open water dives are required with a minimum accumulated bottom time of 90 minutes

Course Structure

1. TDI allows instructor trainers to structure courses according to the number of candidates participating and their skill level

Duration

1. The suggested number of classroom and briefing hours is 4

6.7 Administrative Requirements

Administrative Tasks

1. Collect the course fees from all the instructor candidates
2. Ensure that the instructor candidates have the required equipment
3. Communicate the schedule to the instructor candidates
4. Have the instructor candidates:
 - a. Complete the *TDI Liability Release and Express Assumption of Risk* Form
 - b. Submit the *TDI Medical Statement* Form signed by a licensed physician

Upon successful completion of the course the instructor must:

1. Issue the appropriate TDI certification by submitting the *TDI Instructor Registration* Form to TDI Headquarters

6.8 Required Equipment

The following equipment is required for each instructor and instructor candidate:

1. Dual cylinders, volume appropriate for planned dive, and student gas consumption
2. Two independent first and second stage regulators each with a submersible pressure gauge
3. Buoyancy compensator device (BCD) with power inflator appropriate for sidemount configuration
4. Exposure suit adequate for diving environment
5. Mask and fins

6. Dive computer and a additional depth and timing device; backup computer recommended

Instructor Trainer and candidates must wear full sidemount diving equipment during all water exercises

6.9 Required Subject Areas

Instructor Trainers must use the current *TDI Standards and Procedures* and *TDI Sidemount* student manual or eLearning but may also use any text or materials that they feel help present these topics.

Required Material

1. *SDI/TDI Sidemount* Manual and Knowledge Quest or eLearning
2. *SDI/TDI Sidemount* Instructor Guide

Optional Materials

1. *TDI Sidemount* Cue Cards
2. *TDI Sidemount* Evaluation Slate

The following topics must be covered during this course:

1. Gas matching procedures to include dissimilar volumes
2. Gas management utilizing independent cylinders
3. Psychological considerations
4. Equipment considerations
 - a. Cylinder options
 - b. Regulator options
 - c. Buoyancy compensator / harness options
 - d. Proper weighting
 - d. Equipment configurations
5. Communication
 - a. Hand signals
 - b. Light signals
6. Problem solving
 - a. Gas-sharing
 - b. Gas hemorrhages
 - c. Light failure
 - d. Loss of visibility
 - e. Entanglement
 - f. Self rescue
7. Tight spaces
8. Conservation
9. Difficult water entries
10. S-Drills; specific to sidemount

6.10 Required Skill Performance and Graduation Requirements

The following skills must be completed by the instructor candidate:

Land drills

1. Land drills may be performed at the instructor's discretion

Pre-dive drills

1. Use START before every dive *START is an acronym for S-drill (Out of Gas drill and Bubble Check), Team (buddy equipment checks), Air (gas matching), Route (entry/exit and planned path underwater, Tables (depth, duration, waypoints and schedule)
2. Stress analysis and mitigation

The instructor candidate must perform the following in-water skills at demonstration quality during dives:

1. Demonstrate various propulsion techniques: frog kick, modified frog kick, modified flutter kick, backwards kick, helicopter turns, and hand pulling if appropriate for the environment
2. Demonstrate adequate buoyancy control; ability to hover at fixed position in water column without moving hands or feet
3. Demonstrate adequate trim; ability to maintain proper position during the descent, bottom and ascent portion of the dive
4. Demonstrate the ability to perform the following exercises while maintaining trim and buoyancy in the water column:
 - a. Unclipping and attaching sidemount cylinders
 - b. Perform gas switches with and without a mask
5. Demonstrate the ability to safely manage gas in independent cylinders
6. Demonstrate conservation, awareness, and back referencing techniques
7. Deploy lift bag
8. Carry additional cylinder(s); optional

In order to complete this course, candidates must:

1. Complete all land drills and dive requirements safely and efficiently
2. Satisfactorily complete the *TDI Sidemount* final exam and be able to adequately explain each answer to a prospective student
3. Demonstrate mature, sound judgment concerning dive planning and execution
4. Demonstrate proficiency in teaching the TDI Sidemount course
5. Present at least one graded academic presentation and 1 graded open water presentation on a TDI Sidemount topic and earn a passing score on each