

**§ 197.310**

(b) In addition to the requirements of this subpart, equipment which is permanently installed on vessels and is part of the diving installation must meet Subchapters F and J of this chapter.

(c) All repairs and modifications to pressure vessels used for commercial diving operations must be made in accordance with the requirements of section VIII, division 1 or division 2 of the ASME Code, ASME PVHO-1, part 54 of this chapter, or 49 CFR 173.34, as applicable.

(d) All repairs and modifications to pressure piping used for commercial diving operations must be made in accordance with the requirements of the ANSI Code or part 56 of this chapter, as applicable.

**§ 197.310 Air compressor system.**

A compressor used to supply breathing air to a diver must have—

- (a) A volume tank that is—
  - (1) Built and stamped in accordance with section VIII, division 1 of the ASME Code with—
    - (i) A check valve on the inlet side;
    - (ii) A pressure gage;
    - (iii) A relief valve; and
    - (iv) A drain valve; and
  - (2) Tested after every repair, modification, or alteration to the pressure boundaries as required by § 197.462;
- (b) Intakes that are located away from areas containing exhaust fumes of internal combustion engines or other hazardous contaminants;
- (c) An efficient filtration system; and
- (d) Slow-opening shut-off valves when the maximum allowable working pressure of the system exceeds 500 psig.

**§ 197.312 Breathing supply hoses.**

- (a) Each breathing supply hose must—
  - (1) Have a maximum working pressure that is equal to or exceeds—
    - (i) The maximum working pressure of the section of the breathing supply system in which used; and
    - (ii) The pressure equivalent of the maximum depth of the dive relative to the supply source plus 100 psig;
  - (2) Have a bursting pressure of four times its maximum working pressure;
  - (3) Have connectors that—

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- (i) Are made of corrosion-resistant material;
- (ii) Are resistant to accidental disengagement; and
- (iii) Have a maximum working pressure that is at least equal to the maximum working pressure of the hose to which they are attached; and
- (4) Resist kinking by—
  - (i) Being made of kink-resistant materials; or
  - (ii) Having exterior support.
- (b) Each umbilical must—
  - (1) Meet the requirements of paragraph (a) of this section; and
  - (2) Be marked from the diver or open bell end in 10-foot intervals to 100 feet and in 50-foot intervals thereafter.

**§ 197.314 First aid and treatment equipment.**

- (a) Each dive location must have—
  - (1) A medical kit approved by a physician that consists of—
    - (i) Basic first aid supplies; and
    - (ii) Any additional supplies necessary to treat minor trauma and illnesses resulting from hyperbaric exposure;
  - (2) A copy of an American Red Cross Standard First Aid handbook;
  - (3) A bag-type manual resuscitator with transparent mask and tubing; and
  - (4) A capability to remove an injured diver from the water.
- (b) Each diving installation must have a two-way communications system to obtain emergency assistance except when the vessel or facility ship-to-shore, two-way communications system is readily available.
- (c) Each dive location supporting mixed-gas dives, dives deeper than 130 fsw, or dives outside the no-decompression limits must meet the requirements of paragraph (a) of this section and have—
  - (1) A decompression chamber;
  - (2) Decompression and treatment tables;
  - (3) A supply of breathing gases sufficient to treat for decompression sickness;
  - (4) The medical kit required by paragraph (a)(1) of this section that is—
    - (i) Capable of being carried into the decompression chamber; and
    - (ii) Suitable for use under hyperbaric conditions; and