

marked test pressure of tank, flow capacity will be sufficient to reduce air pressure to 30 percent of the marked test pressure within 3 minutes after pressure relief device opens.

(b) Safety relief devices shall open at pressure not exceeding the marked test pressure of tank and not less than $\frac{7}{10}$ of marked test pressure. (For tolerance for safety relief valves, see §179.500-16(a).)

(c) Cars used for the transportation of flammable gases shall have the safety devices equipped with an approved ignition device.

[Amdt. 179-32, 48 FR 27708, June 16, 1983, as amended at 66 FR 45391, Aug. 28, 2001]

§ 179.500-13 Fixtures.

(a) Attachments, other than those mounted on tank covers or serving as threaded closures for the ends of the tank, are prohibited.

(b) [Reserved]

§ 179.500-14 Test of tanks.

(a) After heat-treatment, tanks shall be subjected to hydrostatic tests in a water jacket, or by other accurate method, operated so as to obtain reliable data. No tank shall have been subjected previously to internal pressure greater than 90 percent of the marked test pressure. Each tank shall be tested to a pressure at least equal to the marked test pressure of the tank. Pressure shall be maintained for 30 seconds, and sufficiently longer to insure complete expansion of tank. Pressure gauge shall permit reading to accuracy of one percent. Expansion gauge shall permit reading of total expansion to accuracy of one percent. Expansion shall be recorded in cubic cm.

(b) No leaks shall appear and permanent volumetric expansion shall not exceed 10 percent of the total volumetric expansion at test pressure.

§ 179.500-15 Handling of tanks failing in tests.

(a) Tanks rejected for failure in any of the tests prescribed may be reheated, and will be acceptable if subsequent to reheat-treatment they are subjected to and pass all of the tests.

(b) [Reserved]

§ 179.500-16 Tests of pressure relief devices.

(a) Pressure relief valves shall be tested by air or gas before being put into service. Valve shall open at pressure not exceeding the marked test pressure of tank and shall be vapor-tight at 80 percent of the marked test pressure. These limiting pressures shall not be affected by any auxiliary closure or other combination.

(b) For pressure relief devices that incorporate a rupture disc, samples of the discs used shall burst at a pressure not exceeding the marked test pressure of tank and not less than $\frac{7}{10}$ of marked test pressure.

[Amdt. 179-32, 48 FR 27708, June 16, 1983, as amended at 66 FR 45391, Aug. 28, 2001]

§ 179.500-17 Marking.

(a) Each tank shall be plainly and permanently marked, thus certifying that tank complies with all requirements of this specification. These marks shall be stamped into the metal of necked-down section of tank at marked end, in letters and figures at least $\frac{1}{4}$ inch high, as follows:

(1) Spec. DOT-107A * * * *, the * * * * to be replaced by figures indicating marked test pressure of the tank. This pressure shall not exceed the calculated maximum marked test pressure permitted, as determined by the formula in §179.500-4(b).

(2) Serial number immediately below the stamped mark specified in paragraph (a)(1) of this section.

(3) Inspector's official mark immediately below the stamped mark specified in paragraph (a)(1) of this section.

(4) Name, mark (other than trade-mark), or initials of company or person for whose use tank is being made, which shall be recorded with the Bureau of Explosives.

(5) Date (such as 1-01, for January 2001) of tank test, so placed that dates of subsequent tests may easily be added.

(6) Date (such as 1-01, for January 2001) of latest test of pressure relief device or of the rupture disc, required only when tank is used for transportation of flammable gases.