

(b) If the tank has additional framework to guard against accidental puncturing of the tank, the shell and head thickness must be  $\frac{1}{8}$  inch or more.

**§ 64.19 External pressure.**

(a) A tank without a vacuum breaker must be designed to withstand an external pressure of  $7\frac{1}{2}$  psig or more.

(b) A tank with a vacuum breaker must be designed to withstand an external pressure of 3 psig or more.

**§ 64.21 Material.**

The material for a tank must meet the requirements in Division 1 of section VIII of the ASME Code.

[CGD 73-172, 39 FR 22950, June 25, 1974, as amended by CGD 84-043, 55 FR 37410, Sept. 11, 1990]

**§ 64.23 Gasket and lining.**

Each gasket and lining must be made of material that is—

(a) Chemically compatible with the product for which the tank is approved; and

(b) Resistant to deterioration from the product for which the tank is approved.

**§ 64.25 Cross section.**

A tank must have a cross section design that is—

(a) Circular; or

(b) Other than circular and stress analyzed experimentally by the method contained in UG-101 of the ASME Code.

[CGD 73-172, 39 FR 22950, June 25, 1974, as amended by CGD 84-043, 55 FR 37410, Sept. 11, 1990]

**§ 64.27 Base.**

The base of an MPT must be as wide and as long as the tank.

**§ 64.29 Tank saddles.**

If a tank is not completely supported by a framework, it must be supported by two or more external saddles, each of which extends to 120 degrees or more of the shell circumference.

**§ 64.31 Inspection opening.**

An MPT must have an inspection opening that is designed in accordance

with Division 1 of section VIII of the ASME Code.

[CGD 73-172, 39 FR 22950, June 25, 1974, as amended by CGD 84-043, 55 FR 37410, Sept. 11, 1990]

**§ 64.33 Pipe connection.**

Each pipe connection that is not a pressure relief device must be fitted with a manually operated stop valve or closure located as close to the tank as practicable.

**§ 64.35 Bottom filling or discharge connection.**

If an MPT is designed with a filling or discharge connection in the bottom, the connection must be fitted with a bolted blank flange, threaded cap, or similar device to protect against leakage of the product, and a manually operated valve that is located—

(a) Inside the tank and operated outside the tank; or

(b) Outside the tank but as close to it as practicable.

**§ 64.37 Valve and fitting guard.**

Each valve and fitting must be protected from mechanical damage by—

(a) The tank;

(b) A tank saddle;

(c) The framework; or

(d) A guard.

**§ 64.39 Valve securing device.**

Each filling and discharge valve must have a securing device to prevent unintentional opening.

**§ 64.41 Stop valve closure.**

A stop valve that operates by a screwed spindle must close in a clockwise direction.

**§ 64.43 Lifting fittings.**

Each MPT must have attached lifting fittings so that the tank remains horizontal and stable while being moved.

**§ 64.45 Securing devices.**

An MPT or its framework must have sufficient number of positive action securing devices, including hooks, lugs, or padeyes, to attach the unit to the vessel so that—

(a) The stress does not exceed the standard contained in § 64.15; and