§ 64.13 Allowable stress; tank.

(a) In accordance with the ASME Code and this subpart;
(b) With a maximum gross weight of 55,000 pounds;
(c) To hold a liquid cargo that has a vapor pressure of 43 pounds per square inch absolute (psia) or less at a temperature of 122 °F;
(d) With a minimum service temperature of 0 °F or higher;
(e) With a maximum allowable working pressure of not less than 20 pounds per square inch gauge (psig) but not more than 48 psig; and
(f) To withstand dynamic loading conditions applied simultaneously.


§ 64.13 Allowable stress; tank.

(a) The calculated stress in the tank under design conditions, including dynamic loading conditions applied simultaneously, must not exceed the allowable stress listed in Division 1 of section VIII of the ASME Code, for a design temperature of 122 °F.

(b) The calculated stress in the tank at test pressure must not exceed 75 percent of the minimum yield stress,1 or 37.5 percent of the minimum tensile stress1 of the material, whichever is less.


§ 64.15 Allowable stress; framework.

The calculated stress for the framework must be 80 percent or less of the minimum yield stress of the framework material under the dynamic loading conditions that are applied simultaneously.

§ 64.17 Minimum tank thickness.

(a) Except as allowed in paragraph (b) of this section, a tank with a diameter of—
(1) 6 feet or less must have a shell and head of 3⁄16 inch thickness or more; or
(2) More than 6 feet must have a shell and head of 3⁄8 inch thickness or more.

(b) If the tank has additional framework to guard against accidental puncturing of the tank, the shell and head thickness must be 3⁄8 inch or more.

§ 64.19 External pressure.

(a) A tank without a vacuum breaker must be designed to withstand an external pressure of 7½ 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.


§ 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.


§ 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

1 Listed in Division 1 of section VIII of the ASME Code.