

§ 178.337

49 CFR Ch. I (10–1–01 Edition)

which, by reason of its size, construction or attachment to a motor vehicle is loaded or unloaded without being removed from the motor vehicle; and

(3) Is not fabricated under a specification for cylinders, portable tanks, tank cars, or multi-unit tank car tanks.

Cargo tank motor vehicle, as defined in §171.8 of this subchapter, means a motor vehicle with one or more cargo tanks permanently attached to or forming an integral part of the motor vehicle.

Cargo tank wall means those parts of the cargo tank which make up the primary lading retention structure including shell, bulkheads, and fittings which, when closed during transportation of lading, yields the minimum volume of the cargo tank assembly.

Design type means one or more cargo tanks which are made—

- (1) To the same specification;
- (2) By the same manufacturer;
- (3) To the same engineering drawings and calculations, except for minor variations in piping which do not affect the lading retention capability of the cargo tank;
- (4) Of the same materials of construction;
- (5) To the same cross-sectional dimensions;
- (6) To a length varying by no more than five percent;
- (7) With the volume varying by no more than five percent (due to a change in length only); and
- (8) For the purposes of §178.338 only, with the same insulation system.

Manufacturer means any person engaged in the manufacture of a DOT specification cargo tank, cargo tank motor vehicle or cargo tank equipment which forms part of the cargo tank wall. This term includes attaching a cargo tank to a motor vehicle or to a motor vehicle suspension component which involves welding on the cargo tank wall. A manufacturer shall register with the Department in accordance with subpart F of part 107 in subchapter A of this chapter.

(b) *Design certification.* (1) Each cargo tank design type shall be certified in conformance with the specification requirements by a Design Certifying En-

gineer registered in accordance with subpart F of part 107.

(2) The Design Certifying Engineer shall furnish to the manufacturer a certificate to indicate compliance with the specification requirements. The certificate must include the sketches, drawings, and calculations used for certification. Each certificate, including sketches, drawings, and calculations, shall be signed by the Design Certifying Engineer.

(3) The manufacturer shall retain the design certificate at his principal place of business for as long as he manufactures DOT specification cargo tanks.

(c) *Exceptions to the ASME Code.* Unless otherwise specified, when exceptions are provided in this subpart from compliance with certain paragraphs of the ASME Code, compliance with those paragraphs is not prohibited.

[Amdt. 178–89, 55 FR 37055, Sept. 7, 1990, as amended by Amdt. 178–98, 58 FR 33306, June 16, 1993; Amdt. 178–118, 61 FR 51339, Oct. 1, 1996]

§ 178.337 Specification MC 331; cargo tank motor vehicle primarily for transportation of compressed gases as defined in subpart G of part 173 of this subchapter.

§ 178.337–1 General requirements.

(a) *ASME Code construction.* Tanks must be—

- (1) Seamless or welded construction, or a combination of both;
- (2) Designed and constructed in accordance with the ASME Code;
- (3) Made of steel or aluminum; however, if aluminum is used, the cargo tank must be insulated and the hazardous material to be transported must be compatible with the aluminum (see §§178.337–1(e)(2), 173.315(a) table, and 178.337–2(a)(1) of this subchapter); and
- (4) Covered with a steel jacket if the cargo tank is insulated and used to transport a flammable gas (see §173.315(a) table Note 11 of this subchapter).

(b) *Design pressure.* The design pressure of a cargo tank authorized under this specification shall be not less than the vapor pressure of the commodity contained therein at 115 °F. or as prescribed for a particular commodity in §173.315(a) of this subchapter, except