

most recent inspection and test reports made under this section. Copies of such reports must be provided to the lessee if the cargo tank is leased for more than 30 days.

[Amdt. 180-2, 54 FR 25032, June 12, 1989, as amended at 55 FR 21038, May 22, 1990; 55 FR 37069, Sept. 7, 1990; 56 FR 27879, June 17, 1991; 58 FR 12905, Mar. 8, 1993; Amdt. 180-2, 59 FR 1786, Jan. 12, 1994; Amdt. 180-10, 61 FR 51343, Oct. 1, 1996; 63 FR 52850, Oct. 1, 1998; 64 FR 28052, May 24, 1999; 65 FR 50463, Aug. 18, 2000; 67 FR 61016, Sept. 27, 2002; 68 FR 19290, Apr. 18, 2003; 68 FR 52372, Sept. 3, 2003; 69 FR 54047, Sept. 7, 2004; 70 FR 34077, June 13, 2005]

are authorized for service provided they conform to all applicable safety requirements of this subchapter:

Specification prescribed in the current regulations	Other specifications permitted	Notes
105A200W	105A100W	1
105A200ALW	105A100ALW	1
105A300W	ICC-105, 105A300.	
105A400W	105A400.	
105A500W	105A500.	
105A600W	105A600.	
106A500X	ICC-27, BE-27, 106A500.	
106A800X	106A800.	
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NOTE 1: Tanks built as Specification DOT 105A100W or DOT 105A100ALW may be altered and converted to DOT 105A200W and DOT 105A200ALW, respectively.

NOTE 2: The test pressures of tanks built in the United States between January 1, 1941 and December 31, 1955, may be increased to conform to Specification 107A. Original and revised test pressure markings must be indicated and may be shown on the tank or on a plate attached to the bulkhead of the car. Tanks built before 1941 are not authorized.

Subpart F—Qualification and Maintenance of Tank Cars

SOURCE: Amdt. 180-8, 60 FR 49079, Sept. 21, 1995, unless otherwise noted.

§ 180.501 Applicability.

(a) This subpart prescribes requirements, in addition to those contained in parts 107, 171, 172, 173, and 179 of this subchapter, applicable to any person who manufactures, fabricates, marks, maintains, repairs, inspects, or services tank cars to ensure continuing qualification.

(b) Any person who performs a function prescribed in this part shall perform that function in accordance with this part.

[Amdt. 180-8, 60 FR 49079, Sept. 21, 1995, as amended by Amdt. 179-50, 61 FR 33256, June 26, 1996]

§ 180.503 Definitions.

The definitions contained in §§ 171.8 and 179.2 of this subchapter apply.

§ 180.505 Quality assurance program.

The quality assurance program requirements of § 179.7 of this subchapter apply.

§ 180.507 Qualification of tank cars.

(a) Each tank car marked as meeting a "DOT" specification or any other tank car used for the transportation of a hazardous material must meet the requirements of this subchapter or the applicable specification to which the tank was constructed.

(b) *Tank car specifications no longer authorized for construction.* (1) Tank cars prescribed in the following table

(2) For each tank car conforming to and used under an exemption issued before October 1, 1984, which authorized the transportation of a cryogenic liquid in a tank car, the owner or operator shall remove the exemption number stenciled on the tank car and stamp the tank car with the appropriate Class DOT-113 specification followed by the applicable exemption number. For example: DOT-113D60W-E * * * * (asterisks to be replaced by the exemption number). The owner or operator marking a tank car in this manner shall retain on file a copy of the last exemption in effect during the period the tank car is in service. No person may modify a tank car marked under this paragraph unless the modification is in compliance with an applicable requirement or provision of this subchapter.

(3) Specification DOT-113A175W, DOT-113C60W, DOT-113D60W, and DOT-113D120W tank cars may continue in use, but new construction is not authorized.

(4) Class DOT 105A and 105S tank cars used to transport hydrogen chloride, refrigerated liquid under the terms of DOT-E 3992 may continue in service, but new construction is not authorized.

(5) Specification DOT-103A-ALW, 103AW, 103ALW, 103ANW, 103BW, 103CW, 103DW, 103EW, and 104W tank

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cars may continue in use, but new construction is not authorized.

[Amdt. 180-8, 60 FR 49079, Sept. 21, 1995, as amended at 68 FR 48572, Aug. 14, 2003]

§ 180.509 Requirements for inspection and test of specification tank cars.

(a) *General.* (1) Each tank car facility shall evaluate a tank car according to the requirements specified in § 180.511.

(2) Each tank car that successfully passes a periodic inspection and test must be marked as prescribed in § 180.515.

(3) A written report as specified in § 180.517(b) must be prepared for each tank car that is inspected and tested under this section.

(b) *Conditions requiring inspection and test of tank cars.* Without regard to any other periodic inspection and test requirements, a tank car must have an appropriate inspection and test according to the type of defect and the type of maintenance or repair performed if:

(1) The tank car shows evidence of abrasion, corrosion, cracks, dents, distortions, defects in welds, or any other condition that makes the tank car unsafe for transportation. An example is if maintenance is performed to replace a fitting, then only a leakage pressure test needs to be performed.

(2) The tank car was in an accident and damaged to an extent that may adversely affect its capability to retain its contents.

(3) The tank bears evidence of damage caused by fire.

(4) The Associate Administrator for Safety, FRA, requires it based on the existence of probable cause that a tank car or a class or design of tank cars may be in an unsafe operating condition.

(c) *Frequency of inspection and tests.* Each tank car shall have an inspection and test according to the requirements of this paragraph.

(1) For Class 107 tank cars and tank cars of riveted construction, the tank car must have a hydrostatic pressure test and visual inspection conforming to the requirements in effect prior to July 1, 1996, for the tank specification.

(2) For Class DOT 113 tank cars, see § 173.319(e) of this subchapter.

(3) For fusion welded tank cars, each tank car must have an inspection and

test in accordance with paragraphs (d) through (k) of this section.

(i) For cars transporting materials not corrosive to the tank, every 10 years for the tank and service equipment (i.e., filling and discharge, venting, safety, heating, and measuring devices).

(ii) For non-lined or non-coated tank cars transporting materials corrosive to the tank, an interval based on the following formula, but in no case shall the interval exceed 10 years for the tank and 5 years for service equipment:

$$i = \frac{t_1 - t_2}{r}$$

Where:

i is the inspection and test interval.

t₁ is the actual thickness.

t₂ is the allowable minimum thickness under paragraph (g) of this section.

r is the corrosion rate per year.

(iii) For lined or coated tank cars transporting a material corrosive to the tank, every 10 years for the tank, 5 years for the service equipment.

(A) When a lining or coating is applied to protect the tank shell from the lading, the owner of the lining or coating shall determine the periodic inspection interval, test technique, and acceptance criteria for the lining or coating. The owner must maintain at its principal place of business all supporting documentation used to make such a determination, such as the lining or coating manufacturer's recommended inspection interval, test technique, and acceptance criteria. The supporting documentation must be made available to FRA upon request.

(B) The owner of the lining or coating shall provide the periodic inspection interval, test technique, and acceptance criteria for the lining or coating to the person responsible for qualifying the lining and coating.

(d) *Visual inspection.* At a minimum, each tank car facility must visually inspect the tank externally and internally as follows:

(1) An internal inspection of the tank shell and heads for abrasion, corrosion, cracks, dents, distortions, defects in welds, or any other condition that makes the tank car unsafe for transportation, and except in the areas