

## § 178.345-14 Marking.

(a) *General.* The manufacturer shall certify that each cargo tank motor vehicle has been designed, constructed and tested in accordance with the applicable Specification DOT 406, DOT 407 or DOT 412 (§§178.345, 178.346, 178.347, 178.348) cargo tank requirements and, when applicable, with Section VIII of the ASME Code (IBR, see §171.7 of this subchapter). The certification shall be accomplished by marking the cargo tank as prescribed in paragraphs (b) and (c) of this section, and by preparing the certificate prescribed in §178.345–15. Metal plates prescribed by paragraphs (b), (c), (d) and (e) of this section, must be permanently attached to the cargo tank or its integral supporting structure, by brazing, welding or other suitable means. These plates must be affixed on the left side of the vehicle near the front of the cargo tank (or the frontmost cargo tank of a multi-cargo tank motor vehicle), in a place readily accessible for inspection. The plates must be permanently and plainly marked in English by stamping, embossing or other means in characters at least 3/16 inch high. The information required by paragraphs (b) and (c) of this section may be combined on one specification plate.

(b) *Nameplate.* Each cargo tank must have a corrosion resistant nameplate permanently attached to it. The following information, in addition to any applicable information required by the ASME Code, must be marked on the tank nameplate (parenthetical abbreviations may be used):

(1) DOT-specification number DOT XXX (DOT XXX) where “XXX” is replaced with the applicable specification number. For cargo tanks having a variable specification plate, the DOT-specification number is replaced with the words “See variable specification plate.”

(2) Original test date, month and year (Orig. Test Date).

(3) Tank MAWP in psig.

(4) Cargo tank test pressure (Test P), in psig.

(5) Cargo tank design temperature range (Design temp. range), \_ °F to \_ °F.

(6) Nominal capacity (Water cap.), in gallons.

(7) Maximum design density of lading (Max. lading density), in pounds per gallon.

(8) Material specification number—shell (Shell matl, yyy<sup>\*\*\*</sup>), where “yyy” is replaced by the alloy designation and “\*\*\*” by the alloy type.

(9) Material specification number—heads (Head matl, yyy<sup>\*\*\*</sup>), where “yyy” is replaced by the alloy designation and “\*\*\*” by the alloy type.

Note: When the shell and heads materials are the same thickness, they may be combined, (Shell&head matl, yyy<sup>\*\*\*</sup>).

(10) Weld material (Weld matl.).

(11) Minimum thickness—shell (Min. shell-thick), in inches. When minimum shell thicknesses are not the same for different areas, show (top \_, side \_, bottom \_, in inches).

(12) Minimum thickness—heads (Min. heads thick.), in inches.

(13) Manufactured thickness—shell (Mfd. shell thick.), top \_, side \_, bottom \_, in inches. (Required when additional thickness is provided for corrosion allowance.)

(14) Manufactured thickness—heads (Mfd. heads thick.), in inches. (Required when additional thickness is provided for corrosion allowance.)

(15) Exposed surface area, in square feet.

(c) *Specification plate.* Each cargo tank motor vehicle must have an additional corrosion resistant metal specification plate attached to it. The specification plate must contain the following information (parenthetical abbreviations may be used):

- (1) Cargo tank motor vehicle manufacturer (CTMV mfr.).
- (2) Cargo tank motor vehicle certification date (CTMV cert. date), if different from the cargo tank certification date.
- (3) Cargo tank manufacturer (CT mfr.).
- (4) Cargo tank date of manufacture (CT date of mfr.), month and year.
- (5) Maximum weight of lading (Max. Payload), in pounds.
- (6) Maximum loading rate in gallons per minute (Max. Load rate, GPM).
- (7) Maximum unloading rate in gallons per minute (Max. Unload rate).
- (8) Lining material (Lining), if applicable.
- (9) Heating system design pressure (Heating sys. press.), in psig, if applicable.
- (10) Heating system design temperature (Heating sys. temp.), in °F, if applicable.

(d) *Multi-cargo tank motor vehicle.* For a multi-cargo tank motor vehicle having all its cargo tanks not separated by any void, the information required by paragraphs (b) and (c) of this section may be combined on one specification plate. When separated by a void, each cargo tank must have an individual nameplate as required in paragraph (b) of this section, unless all cargo tanks are made by the same manufacturer with the same materials, manufactured thickness, minimum thickness and to the same specification. The cargo tank motor vehicle may have a combined nameplate and specification plate. When only one plate is used, the plate must be visible and not covered by insulation. The required information must be listed on the plate from front to rear in the order of the corresponding cargo tank location.

(e) *Variable specification cargo tank.* Each variable specification cargo tank must have a corrosion resistant metal variable specification plate attached to it. The mounting of this variable specification plate must be such that only the plate identifying the applicable specification under which the tank is being operated is legible.

(1) The following information must be included (parenthetical abbreviations are authorized):

Specification DOT XXX (DOT XXX), where “XXX” is replaced with the applicable specification number.

Equipment required	Required rating <sup>1</sup>
Pressure relief devices:	
Pressure actuated type	_____
Frangible type	_____
Lading discharge devices	_____
Top	_____
Bottom	_____
Pressure unloading fitting	_____

Closures:	
Manhole	_____
Fill openings	_____
Discharge openings	_____

<sup>1</sup>Required rating—to meet the applicable specification.

(2) If no change of information in the specification plate is required, the letters “NC” must follow the rating required. If the cargo tank is not so equipped, the word “None” must be inserted.

(3) Those parts to be changed or added must be stamped with the appropriate MC or DOT Specification markings.

(4) The alterations that must be made in order for the tank to be modified from one specification to another must be clearly indicated on the manufacturer's certificate and on the variable specification plate.

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