§ 179.24 Stamping.

(a)(1) After July 25, 2012, to certify compliance with federal requirements, the tank manufacturer must install two identical permanent identification plates, one located on both inboard surfaces of the body bolsters of the tank car. One identification plate must be installed on the right side (AR) of the tank car, and the other must be installed on the back end left side (BL) body bolster webs so that each plate is readily accessible for inspection. The plates must be at least 3/32 inch thick and manufactured from corrosion resistant metal. When the tank jacket (flashing) covers the body bolster web and identification plates, additional identical plates must be installed on the AR and BL corners of the tank in a visible location. Tank cars built before July 25, 2012, may have the plate instead of or in addition to the stamping.

(2) Each plate must be stamped, embossed, or otherwise marked by an equally durable method in letters 3/16 inch high with the following information (parenthetical abbreviations may be used, and the AAR form reference is to the applicable provisions of the AAR Specifications for Tank Cars, December 2000 edition (IBR, see §171.7 of this subchapter)):

(i) **Tank Manufacturer (Tank MFG):** Full name of the car builder as shown on the certificate of construction (AAR Form 4–2).

(ii) **Tank Manufacturer’s Serial Number (SERIAL NO):** For the specific car.

(iii) **AAR Number (AAR NO):** The AAR number from line 3 of AAR Form 4–2.

(iv) **Tank Specification (SPECIFICATION):** The specification to which the tank was built from line 7 of AAR form 4–2.

(v) **Tank Shell Material/Head Material (SHELL MATL/HEAD MATL):** ASTM or AAR specification of the material used in the construction of the tank shell and heads from lines 15 and 16 of AAR Form 4–2. For Class DOT–113W, DOT–115W, AAR–204W, and AAR–206W, the materials used in the construction of the outer tank shell and heads must be listed. Only list the alloy (e.g., 5154) for aluminum tanks and the type (e.g., 304L or 316L) for stainless steel tanks.

(vi) **Insulation Material (INSULATION MATL):** Generic names of the first and second layer of any thermal protection/insulation material applied.

(vii) **Insulation Thickness (INSULATION THICKNESS):** In inches.

(viii) **Underframe/Stub Sill Type (UF/SS DESIGN):** The design from Line 32 of AAR Form 4–2.

(ix) **Date of Manufacture (DATE OF MFR):** The month and year of tank manufacture. If the underframe has a different built date than the tank, show both dates.

(3) When a modification to the tank changes any of the information shown in paragraph (a)(2) of this section, the car owner or the tank car facility making the modification must install an additional variable identification plate on the tank in accordance with paragraph (a)(1) of this section showing the following information:

(i) **AAR Number (AAR NO):** The AAR number from line 3 of AAR Form 4–2 for the alteration or conversion.

(ii) All items of paragraph (a)(2) followed by the month and year of modification.
§ 179.100  General specifications applicable to pressure tank car tanks.

§ 179.100–1  Type.

(a) Tanks built under this specification shall be fusion-welded with heads designed convex outward. Except as provided in §179.103 they shall be circular in cross section, shall be provided with a manway nozzle on top of the tank of sufficient size to permit access to the interior, a manway cover to provide for the mounting of all valves, measuring and sampling devices, and a protective housing. Other openings in the tank are prohibited, except as provided in part 173 of this chapter, §§179.100–14, 179.101–1, 179.102 or §179.103.

(b) Head shields and shells of tanks built under this specification must be normalized. Tank car heads must be normalized after forming unless specific approval is granted for a facility’s equipment and controls.

§ 179.100–4  Insulation.

(a) If insulation is applied, the tank shell and manway nozzle must be insulated with an approved material. The entire insulation must be covered with a metal jacket of a thickness not less than 0.075 inches, measured on the arc, but in all cases the width shall be sufficient to bring the entire width of the longitudinal welded joint, including welds, above the bolster.

(b) If insulation is a specification requirement, it shall be of sufficient thickness so that the thermal conductance at 60 °F is not more than 0.075 Btu per hour, per square foot, per degree F temperature differential. If exterior heaters are attached to tank, the thickness of the insulation over each heater element may be reduced to one-half that required for the shell.