

§ 179.220-20

or its equivalent. The valve and seat must be readily accessible or removable for repairs, including grinding.

(b) Inner container may be equipped with bottom washout of approved design. If applied, bottom washout must comply with the following requirements:

(1) The extreme projection of the bottom washout equipment may not be more than that allowed by appendix E of the AAR Specifications for Tank Cars.

(2) Bottom washout must be of cast, forged or fabricated metals. If it is welded to the inner container, it must be of good weldable quality in conjunction with metal of tank.

(3) If washout nozzle extends below the bottom of the outer shell, a V-shaped breakage groove shall be cut (not cast) in the upper part of the nozzle at a point immediately below the lowest part of the inside closure seat or plug. In no case may the nozzle wall thickness at the root of the "V" be more than 1/4-inch. Where the nozzle is not a single piece, provisions shall be made for the equivalent of the breakage groove. The nozzle must be of a thickness to insure that accidental breakage will occur at or below the "V" groove or its equivalent. On cars without a continuous center sill, the breakage groove or its equivalent may not be more than 15 inches below the outer shell. On cars with continuous center sills, the breakage groove or its equivalent must be above the bottom of the center sill construction.

(4) The closure plug and seat must be readily accessible or removable for repairs.

(5) The closure of the washout nozzle must be equipped with a 3/4-inch solid screw plug. Plug must be attached by at least a 1/4-inch chain.

(6) Joints between closures and their seats may be gasketed with suitable material.

[Amdt. 179-9, 36 FR 21342, Nov. 6, 1971, as amended by Amdt. 179-40, 52 FR 13048, Apr. 20, 1987; 68 FR 75763, Dec. 31, 2003]

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§ 179.220-20 Reinforcements, when used, and appurtenances not otherwise specified.

All attachments to inner container and outer shell must be applied by approved means.

[Amdt. 179-9, 36 FR 21342, Nov. 6, 1971]

§ 179.220-22 Closure for openings.

(a) All plugs must be solid, with NPT threads, and must be of a length which will screw at least six threads inside the face of fitting or tank. Plugs, when inserted from the outside of the outer shell tank heads, must have the letter "S" at least three-eighths inch in size stamped with steel stamp or cast on the outside surface to indicate the plug is solid.

(b) Openings in the outer shell used during construction for installation must be closed in an approved manner.

[Amdt. 179-9, 36 FR 21343, Nov. 6, 1971]

§ 179.220-23 Test of tanks.

(a) Each inner container or compartment must be tested hydrostatically to the pressure specified in § 179.221-1. The temperature of the pressurizing medium must not exceed 100 °F. during the test. The container must hold the prescribed pressure for at least 10 minutes without leakage or evidence of distress. Safety relief devices must not be in place when the test is made.

(b) The inner container must be pressure tested before installation within the outer shell. Items which, because of assembly sequence, must be welded to inner container after its installation within outer shell must have their attachment welds thoroughly inspected by a nondestructive dye penetrant method or its equivalent.

(c) Pressure testing of outer shell is not a specification requirement.

[Amdt. 179-9, 36 FR 21343, Nov. 6, 1971]

§ 179.220-24 Tests of pressure relief valves.

Each safety relief valve must be tested by air or gas for compliance with § 179.15 before being put into service.

[Amdt. 179-9, 36 FR 21343, Nov. 6, 1971, as amended at 62 FR 51561, Oct. 1, 1997]