may the nozzle wall thickness at the root of the "V" be more than ¼-inch. The outlet nozzle or the valve body may be steam jacketed, in which case the breakage groove or its equivalent must be below the steam chamber but above the bottom of the center sill construction. If the outlet nozzle is not a single piece or its exterior valves are applied, provision shall be made for the equivalent of the breakage groove. On cars without continuous center sills, 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 ¾-inch solid screw plug. Plug must be attached by at least a ¼-inch chain.

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

§ 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 21342, 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
Pipeline and Hazardous Materials Safety Admin., DOT

§ 179.221–1 Individual specification requirements.

In addition to §179.220, the individual specification requirements are as follows:

| DOT specification | Insulation | Bursting pressure (psig) | Minimum plate thickness (inches) | Test pressure (psig) | Bottom outlet | Bottom washout | Reference (179.221–***)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>115A60ALW</td>
<td>Yes</td>
<td>240</td>
<td>1¼</td>
<td>60</td>
<td>Optional</td>
<td>Optional</td>
<td>1</td>
</tr>
<tr>
<td>115A60W1</td>
<td>Yes</td>
<td>240</td>
<td>1¼</td>
<td>60</td>
<td>Optional</td>
<td>Optional</td>
<td>1</td>
</tr>
<tr>
<td>115A60W6</td>
<td>Yes</td>
<td>240</td>
<td>1¼</td>
<td>60</td>
<td>Optional</td>
<td>Optional</td>
<td>1</td>
</tr>
</tbody>
</table>


(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.


§ 179.220–25 Stamping.

To certify that the tank complies with all specification requirements, each outer shell must be plainly and permanently stamped in letters and figures at least ¾-inch high into the metal near the center of both outside heads as follows:

Examples of required stamping

| Specifications | DOT-115A60W6 |

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

§ 179.220–26 Stenciling.

(a) The outer shell, or the jacket if the outer shell is insulated, must be stenciled in compliance with AAR Specifications for Tank Cars, appendix C (IBR, see §171.7 of this subchapter).

(b) Stenciling must be applied on both sides of the outer shell or jacket near the center in letters and figures at least 1½ inches high to indicate the safe upper temperature limit, if applicable, for the inner tank, insulation, and the support system.