§ 178.360–2 Manufacture.

The ends of the vessel must be fitted with screw-type closures or flanges (see §178.360–4), except that one or both ends of the vessel may be permanently closed by a welded or brazed plate. Welded or brazed side seams are authorized.


§ 178.360–3 Dimensions.

(a) The inside diameter of the vessel may not exceed 30 cm (12 inches) exclusive of flanges for handling or fastening devices and must have wall thickness and length in accordance with the following:

<table>
<thead>
<tr>
<th>Inside diameter maximum</th>
<th>Threaded closure</th>
<th>Wall thickness minimum—Flanged closure</th>
<th>Length maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td>Cm</td>
<td>Inches</td>
<td>Mm</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>3/32</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>1/8</td>
<td>3.2</td>
</tr>
<tr>
<td>12</td>
<td>30</td>
<td>1/4</td>
<td>6.5</td>
</tr>
</tbody>
</table>

(b) [Reserved]


§ 178.360–4 Closure devices.

(a) Each closure device must be as follows:

(1) Screw-type cap or plug; number of threads per inch must not be less than United States standard pipe threads and must have sufficient length of thread to engage at least 5 threads when securely tightened. Pipe threads must be luted with an appropriate non-hardening compound which must be capable of withstanding up to 149 °C (300 °F) without loss of efficiency. Tightening torque must be adequate to maintain leak tightness with the specific luting compound.

(2) An opening may be closed by a securely bolted flange and leak-tight gasket. Each flange must be welded or brazed to the body of the 2R vessel per (ANSI) Standard B16.5 or (AWWA) Standard C207-55, section 10 (IBR, see §171.7 of this subchapter). A torque wrench must be used in securing the flange with a corresponding torque of no more than twice the force necessary to seal the selected gasket. Gasket material must be capable of withstanding up to 149 °C (300 °F) without loss of efficiency. The flange, whether of ferrous or nonferrous metal, must be constructed from the same metal as the vessel and must meet the dimensional and fabrication specifications for welded construction as follows:

(i) Pipe flanges described in Tables 13, 14, 16, 17, 19, 20, 22, 23, 26 and 28 of ANSI B16.5 (IBR, see §171.7 of this subchapter).

(ii) For nominal pipe sizes, 6, 8, 10, and 12 inches, AWWA Standard C207-55, Table 1, class B, may be used in place of the tables prescribed by paragraph (a)(2)(i) of this section.
§ 178.500 Purpose, scope and definitions.

(a) This subpart prescribes certain requirements for non-bulk packagings for hazardous materials. Standards for these packagings are based on the UN Recommendations. Term used in this subpart are defined in §171.8 of this subchapter.

(b) For composite packagings, two capital letters are used in sequence in the second position of the code, the first indicating the material of the inner receptacle and the second, that of the outer packaging. For example, a plastic receptacle in a steel drum is designated “6HA1.”

(c) For combination packagings, only the code number for the outer packaging is used.

(df) Identification codes are set forth in the standards for packagings in §§178.504 through 178.523 of this subpart.

NOTE TO §178.502: Plastics materials include other polymeric materials such as rubber.

§ 178.503 Marking of packagings.

(a) A manufacturer must mark every packaging that is represented as manufactured to meet a UN standard with the marks specified in this section. The