

§ 179.220–14 Openings in the tanks.

Openings in the inner container and the outer shell must be reinforced in compliance with AAR Specifications for Tank Cars, appendix E (IBR, see § 171.7 of this subchapter). In determining the required reinforcement area for openings in the outer shell, t shall be one-fourth inch.

■ 188. In § 179.220–18, the first sentence in paragraph (a)(1) is revised to read as follows:

179.220–18 Bottom outlets.

(a) * * *

(1) The extreme projection of the bottom outlet equipment may not be more than that allowed by appendix E of the AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter).

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■ 189. In § 179.220–26, paragraph (a) is revised to read as follows:

§ 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).

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■ 190. In § 179.300–7, the table in paragraph (a) is revised to read as follows:

§ 179.300–7 Materials.

(a) * * *

Specifications ²	Tensile strength (psi) welded condition ¹ (minimum)	Elongation in 2 inches (percent) welded condition ¹ (longitudinal) (minimum)
ASTM A 240/A 240M type 304	75,000	25
ASTM A 240/A 240M type 304L	70,000	25
ASTM A 240/A 240M type 316	75,000	25
ASTM A 240/A 240M type 316L	70,000	25
ASTM A 240/A 240M type 321	75,000	25
ASTM A 285 Gr. A	45,000	29
ASTM A 285 Gr. B	50,000	20
ASTM A 285 Gr. C	55,000	20
ASTM A 515/A 515M Gr. 65	65,000	20
ASTM A 515/A 515M Gr. 70	70,000	20
ASTM A 516/A 516M Gr. 70	70,000	20

¹ Maximum stresses to be used in calculations.

² These specifications are incorporated by reference (IBR, see § 171.7 of this subchapter.)

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■ 191. In § 179.300–9, paragraph (a) is revised to read as follows:

§ 179.300–9 Welding.

(a) Longitudinal joints must be fusion welded. Head-to-shell joints must be forge welded on class DOT–106A tanks and fusion welded on class DOT–110A tanks. Welding procedures, welders and fabricators must be approved in accordance with AAR Specifications for Tank Cars, appendix W (IBR, see § 171.7 of this subchapter).

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■ 192. Section 179.300–10 is revised to read as follows:

§ 179.300–10 Postweld heat treatment.

After welding is complete, steel tanks and all attachments welded thereto, must be postweld heat treated as a unit in compliance with the requirements of AAR Specifications for Tank Cars, appendix W (IBR, see § 171.7 of this subchapter).

■ 193. In § 179.300–15, paragraph (a) is revised to read as follows:

§ 179.300–15 Pressure relief devices.

(a) Unless prohibited in part 173 of this subchapter, tanks shall be equipped with one or more relief devices of approved type, made of metal not

subject to rapid deterioration by the lading and screwed directly into tank heads or attached to tank heads by other approved methods. The total discharge capacity shall be sufficient to prevent building up pressure in tank in excess of 82.5 percent of the tank test pressure. When relief devices of the fusible plug type are used, the required discharge capacity shall be available in each head. See AAR Specifications for Tank Cars, appendix A (IBR, see § 171.7 of this subchapter), for the formula for calculating discharge capacity.

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■ 194. In § 179.300–17, paragraph (b) is revised to read as follows:

§ 179.300–17 Tests of pressure relief devices.

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(b) Rupture disks of non-reclosing pressure relief devices must be tested and qualified as prescribed in appendix A, Paragraph 5, of the AAR Manual of Standards and Recommended Practices, Section C—Part III, AAR Specifications for Tank Cars (IBR, see § 171.7 of this subchapter).

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■ 195. In § 179.400–3, paragraph (a)(1) is revised to read as follows:

§ 179.400–3 Type.

(a) * * *

(1) Consist of an inner tank of circular cross section supported essentially concentric within an outer jacket of circular cross section, with the out of roundness of both the inner tank and outer jacket limited in accordance with Paragraph UG–80 in Section VIII of the ASME Code (IBR, see § 171.7 of this subchapter);

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■ 196. In § 179.400–5, paragraph (a) introductory text is revised to read as follows:

§ 179.400–5 Materials.

(a) Stainless steel of ASTM A 240/A 240M (IBR, see § 171.7 of this subchapter), Type 304 or 304L must be used for the inner tank and its appurtenances, as specified in AAR Specifications for Tank Cars, appendix M (IBR, see § 171.7 of this subchapter), and must be—

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■ 197. In § 179.400–6, paragraph (b) is revised to read as follows:

§ 179.400–6 Bursting and buckling pressure.

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(b) The outer jacket of the required evacuated insulation system must be