

Cars (IBR, see § 171.7 of this subchapter).

* * * * *

■ 177. In § 179.200–15, paragraph (c) is revised to read as follows:

§ 179.200–15 Closures for manways.

* * * * *

(c) Manway covers must be of approved cast, forged, or fabricated metals. Malleable iron, if used, must comply with ASTM A 47 (IBR, see § 171.7 of this subchapter), Grade 35018. Cast iron manway covers must not be used.

* * * * *

■ 178. In § 179.200–17, the first sentence of paragraph (a)(1) is revised to read as follows:

§ 179.200–17 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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■ 179. In § 179.200–22, paragraph (d) is revised to read as follows:

§ 179.200–22 Test of tanks.

* * * * *

(d) Caulking of welded joints to stop leaks developed during the foregoing tests is prohibited. Repairs in welded joints shall be made as prescribed in AAR Specifications for Tank Cars,

appendix W (IBR, see § 171.7 of this subchapter).

■ 180. Section 179.201–4 is revised to read as follows:

§ 179.201–4 Material.

All fittings, tubes, and castings and all projections and their closures, except for protective housing, must also meet the requirements specified in ASTM A 262 (IBR, see § 171.7 of this subchapter), except that when preparing the specimen for testing the carburized surface may be finished by grinding or machining.

■ 181. Section 179.201–5 is revised to read as follows:

§ 179.201–5 Postweld heat treatment and corrosion resistance.

(a) Tanks and attachments welded directly thereto must be postweld heat treated as a unit at the proper temperature except as indicated below. Tanks and attachments welded directly thereto fabricated from ASTM A 240/A 240M (IBR, see § 171.7 of this subchapter) Type 430A, Type 304 and Type 316 materials must be postweld heat treated as a unit and must be tested to demonstrate that they possess the corrosion resistance specified in § 179.200–7(d), Footnote 2. Tanks and attachments welded directly thereto, fabricated from ASTM A 240/A 240M Type 304L or Type 316L materials are not required to be postweld heat treated.

(b) Tanks and attachments welded directly thereto, fabricated from ASTM A 240/A 240M Type 304L and Type 316 materials must be tested to demonstrate

that they possess the corrosion resistance specified in § 179.200–7(d), Footnote 2.

■ 182. In § 179.201–6, paragraph (c) is revised to read as follows:

§ 179.201–6 Manways and manway closures.

* * * * *

(c) The manway ring and cover for specifications DOT–103CW, 103DW, 103EW, 111360W7, or 11A100W6 must be made of the metal and have the same inspection procedures specified in AAR Specifications for Tank Cars, appendix M, M3.03 (IBR, see § 171.7 of this subchapter).

* * * * *

■ 183. In § 179.220–6, in paragraph (a), the definition of “S” following the formula is revised to read as follows:

§ 179.220–6 Thickness of plates.

(a) * * *

Where: * * *

S = Minimum tensile strength of plate material in psi as prescribed in AAR Specifications for Tank Cars, appendix M, Table M1 (IBR, see § 171.7 of this subchapter);

* * * * *

■ 184. In § 179.220–7, the table in paragraph (b), paragraph (c) introductory text, paragraph (d) introductory text, and paragraph (e) introductory text are revised to read as follows:

§ 179.220–7 Materials.

* * * * *

(b) * * *

Specifications	Minimum tensile strength (p.s.i.) welded condition ¹	Minimum elongation in 2 inches (percent) weld metal (longitudinal)
AAR TC 128, Gr. B	81,000	19
ASTM A 516 ² , Gr. 70	70,000	20

¹ Maximum stresses to be used in calculations.

² This specification is incorporated by reference (IBR, see § 171.7 of this subchapter).

(c) *Aluminum alloy plate*: Aluminum alloy plate must be suitable for welding and comply with one of the following specifications (IBR, see § 171.7 of this subchapter): * * *

* * * * *

(d) *High alloy steel plate*: High alloy steel plate must comply with one of the following specifications (IBR, see § 171.7 of this subchapter): * * *

(e) *Manganese-molybdenum steel plate*: Manganese-molybdenum steel plate must be suitable for fusion welding and must comply with the

following specification (IBR, see § 171.7 of this subchapter): * * *

* * * * *

■ 185. In § 179.220–10, paragraph (a) is revised to read as follows:

§ 179.220–10 Welding.

(a) All joints must be fusion welded in compliance with AAR Specifications for Tank Cars, appendix W (IBR, see § 171.7 of this subchapter). Welding procedures, welders, and fabricators shall be approved.

* * * * *

■ 186. In § 179.220–11, paragraph (b) is revised to read as follows:

§ 179.220–11 Postweld heat treatment.

* * * * *

(b) Postweld heat treatment of the cylindrical portions of the outer shell to which the anchorage or draft sills are attached must comply with AAR Specifications for Tank Cars, appendix W (IBR, see § 171.7 of this subchapter).

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■ 187. Section 179.220–14 is revised to read as follows: