§ 179.400-21

means for pressure relief must be provided

[Amdt. 179–32, 48 FR 27708, June 16, 1983, as amended at 66 FR 45391, Aug. 28, 2001; 68 FR 75763, Dec. 31, 2003]

§ 179.400-21 Test of pressure relief valves.

Each valve must be tested with air or gas for compliance with §179.401-1 before being put into service.

§ 179.400-22 Protective housings.

Each valve, gage, closure and pressure relief device, with the exception of secondary relief valves for the protection of isolated piping, must be enclosed within a protective housing. The protective housing must be adequate to protect the enclosed components from direct solar radiation, mud, sand, adverse environmental exposure and mechanical damage incident to normal operation of the tank car. It must be designed to provide reasonable access to the enclosed components for operation, inspection and maintenance and so that vapor concentrations cannot build up to a dangerous level inside the housing in the event of valve leakage or pressure relief valve operation. All equipment within the protective housing must be operable by personnel wearing heavy gloves and must incorporate provisions for locks or seals. A protective housing and its cover must be constructed of metal not less than 0.119 inch thick.

$\S 179.400-23$ Operating instructions.

All valves and gages must be clearly identified with corrosion-resistant nameplates. A plate of corrosion-resistant material bearing precautionary instructions for the safe operation of the equipment during storage and transfer operations must be securely mounted so as to be readily visible to an operator. The instruction plate must be mounted in each housing containing operating equipment and controls for product handling. These instructions must include a diagram of the tank and its piping system with the various gages, control valves and pressure relief devices clearly identified and lo-

§179.400-24 Stamping.

(a) A tank that complies with all specification requirements must have the following information plainly and permanently stamped into the metal near the center of the head of the outer jacket at the "B" end of the car, in letters and figures at least \%-inch high, in the following order:

	Example of required stamping
Specification Design service temperature Inner tank Material Shell thickness Head thickness Inside diameter Inner tank builder's initials Date of original test (month and year) and initials of person conducting original test. Water capacity Outer jacket Material Outer jacket builder's initials Car assembler's initials (if other than inner tank or outer jacket builder).	DOT-113A60W. Minus 423 °F. Inner Tank. ASTM A240–304. Shell ¾1s inch. Head ¾1s inch. ID 107 inch. ABC. 00–0000GHK. 00000 lbs. Outer jacket. ASTM A515–70. DEF. XYZ.

- (b) Any stamping on the shell or heads of the inner tank is prohibited.
- (c) In lieu of the stamping required by paragraph (a) of this section, the specified markings may be incorporated on a data plate of corrosion-resistant metal, fillet welded in place on the head of the outer jacket at the "B" end of the car.

§ 179.400-25 Stenciling.

Each tank car must be stenciled in compliance with the provisions of the AAR Specifications for Tank Cars, appendix C (IBR, see §171.7 of this subchapter). The stenciling must also include the following:

- (a) The date on which the rupture disc was last replaced and the initials of the person making the replacement, on the outer jacket in letters and figures at least 1½ inches high.
- (b) The design service temperature and maximum lading weight, in letters and figures at least 1½ inches high adjacent to the hazardous material stencial
- (c) The water capacity, in pounds net at 60 °F., with the tank at its coldest operating temperature, after deduction for the volume above the inlet to the pressure relief device or pressure control valve, structural members, baffles,