

§ 162.028-1

46 CFR Ch. I (10-1-06 Edition)

§ 162.028-1 **Applicable specifications.**

(a) There are no other Coast Guard specifications applicable to this subpart.

(b) [Reserved]

§ 162.028-2 **Classification.**

(a) Every portable fire extinguisher shall be classified as to type and size as specified in § 76.50-5 (Subchapter H—Passenger Vessels) of this chapter.

(b) [Reserved]

§ 162.028-3 **Requirements.**

(a) *General.* Every portable fire extinguisher shall conform to the requirements for listing and labeling by a recognized laboratory, and shall be of such design, materials, and construction as to meet the requirements specified in this section.

(b) *Design and weight.* Every portable fire extinguisher shall be self-contained, i.e., when charged it shall not require any additional source of extinguishing agent or expellant energy for its operation during the time it is being discharged, and it shall weigh not more than 55 pounds, maximum, when fully charged.

(c) *Materials.* Materials used for exposed working parts shall be corrosion-resistant to salt water and spray. Materials used for other exposed parts shall be either corrosion-resistant or shall be protected by a suitable corrosion-resistant coating.

(1) *Corrosion-resistant materials.* The materials which are considered to be corrosion-resistant are copper, brass, bronze, certain copper-nickel alloys, certain alloys of aluminum, certain plastics, and certain stainless steels.

(2) *Corrosion-resistant coatings.* (i) The following systems of organic or metallic coatings for exposed non-working ferrous parts, when applied on properly prepared surfaces after all cutting, forming, and bending operations are completed, are considered to provide suitable corrosion resistance:

(a) Bonderizing, followed by the application of zinc chromate primer, followed by one or more applications of enamel; or,

(b) Hot-dipped or electrodeposited zinc in thicknesses not less than 0.002 inch; or,

(c) Electrodeposited cadmium in thicknesses not less than 0.001 inch; or,

(d) Hot-dipped or sprayed aluminum in thicknesses not less than 0.002 inch; or,

(e) Copper plus nickel in total thicknesses not less than 0.003 inch, of which the nickel is not less than 0.002 inch, plus any thickness of chrome.

(ii) The metallic platings of less than the thicknesses specified in this paragraph are not acceptable for the protection against corrosion of ferrous parts.

(3) *Decorative platings.* Decorative platings in any thicknesses applied over corrosion-resistant materials and corrosion-resistant coatings are acceptable for either working or non-working parts.

(4) *Dissimilar metals.* The use of dissimilar metals in combination shall be avoided wherever possible, but when such contacts are necessary, provisions (such as bushings, gaskets, or o-rings) shall be employed to prevent such deleterious effects as galvanic corrosion, freezing or buckling of parts, and loosening or tightening of joints due to differences in thermal expansion.

(5) *Suitability of materials.* All extinguishers submitted for approval shall undergo the salt spray test in accordance with paragraph (c)(6) of this section.

(6) *Salt spray tests.* Expose the complete fully charged specimen extinguisher to a 20 percent sodium chloride solution spray at a temperature of 95 °F. (35 °C.) for a period of 240 hours. The procedures and apparatus described in Method 811 of Federal Test Method Standard No. 151 are suitable. Alternate methods may be found satisfactory if the results are comparable. Following the test, allow the specimen extinguisher to air dry for a period of 48 hours. Following the air drying—

(i) The extinguisher must be capable of being operated and recharged in a normal fashion;

(ii) Any coating required in this section to be corrosion resistant must remain intact and must not be removable (when such removal exposes a material subject to corrosion) by such action as washing or rubbing with a thumb or fingernail;