



Cadmium

[QQ-P-416F]

Type I: As plated.

Type II: Supplementary chromate treatment. Type II plating shall not show white corrosion products of cadmium, pitting, or basis metal corrosion products at the end of 96 hours (20%) salt spray exposure per following table:

Salt-Spray Test

Type	Class	Test period for white Orrosion products (hours)
Type II	Class 1	96
	Class 2	96
	Class 3	96

Unless otherwise specified, chromate treatment required for Type II is distinctly colored iridescent bronze to brown including olive drab, yellow and forest green.

Type III: Supplementary phosphate treatment. Type III shall conform to Type I of TT-C-490. Type III is used as a paint base.

Class 1: .0005" minimum thickness

Class 2: .0003" minimum thickness, additional thickness requirements are given in paragraph 3.3.1 amendment 2, of this specification.

Cadmium (Cad) is a bright silvery white metal deposit (as plated). Supplementary treatments for type II can be golden, iridescent, amber, black, olive drab, or clear. All enhance the corrosion resistance of the coating. Corrosion resistance is very good, especially with type II finish. The cadmium plating shall be smooth, adherent, uniform in appearance, free from blisters, pits, nodules, burning, and other defects when examined visually without magnification.

Luster: Unless otherwise specified, the use of brightening agents in plating solution is prohibited on components with a specified heat treatment of 180 Ksi minimum tensile strength (HRc 40) and higher. Either a bright (not caused by brightening agents) or dull luster shall be acceptable. Brighteners may be used with alloys listed in paragraph 3.2.8 of the specification. Parts which have been machined, ground, cold formed, or cold straightened after heat treatment shall receive stress relief bake in accordance with table I or Ia of the specification prior to shot peening, cleaning or plating. All parts shall be baked within 4 hours of plating as specified in tables I of this specification. Baking on types II and III shall be done prior to application of supplementary coatings.

For Class 1 and 2 the minimum cadmium thickness requirement shall be met after the supplementary treatment.

Excellent for plating of stainless steels that are to be used in conjunction with aluminum to prevent galvanic corrosion.

Cadmium deposits should not be used when an alternate process meets the performance requirements of this specification.

Applications include:
fasteners; aircraft components; automotive components.