

Specifications

Category	Specifications
Sulphuric Acid Anodising	BS EN 7599:2010 (replaces BS1615 & BS EN 12373-1) BS 3989 (Architectural), BS EN 2284, Def Stan 03-25, MIL-A-8625 Type II MIL-STD-171 7.2.1 and 7.2.2 Def Stan 21-5 2-1 JP 213 Method 1 JP 217 TS112 F3 + D2 DS26.00 F3 + D2 P&G STD 41-013 ASTM B580 Types B, C, D, E and F
Hard Anodising	ISO BS 10074:2010 (BS5599), Def Stan 03-26, MIL-A-8625 Type III
Alocrom 1200 / 1000	Def Stan 03-18, MIL-C-5541
Chromic Acid Anodising	BS EN 2101, Def Stan 03-24, MIL-A-8625 Type I Def Stan 21-5/2-2 MIL-STD-171 7.1.1 TS 112 D1 JP 213 Method 2 ASTM B580 Type G
Satin Chrome Plating	QQ-C-320 Type 2 Excellent hardness (RC68-74), wear resistance, and erosion resistance. Has low coefficient of friction, and is resistant to heat. Can be rendered porous for lubrication purposes. Class 1: .00001"-.00002" min thickness. Decorative plating usually over copper and nickel undercoats. Class 2: Thickness as specified on drawing. Engineering plating. Class 2a: Thickness as specified on drawing. Post bake 375F for 3 hours. Class 2b: For parts below RC-40 and subject to static loads or designed for limited life under dynamic loads. Shot peening and post bake not required. Class 2c: For parts below RC-40 and designed for unlimited life under dynamic loads. Shot peen per MIL-S-13165. Class 2d: For parts above RC-40 and subject to static loads or designed for limited life under dynamic loads. Post bake at 375F for 3 hours. Class 2e: For parts above RC-40 and designed for unlimited life under dynamic loads. Shot peen before plate. Post bake at 375F for 3 hours. Service Condition 2, 3 & 4

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Bright Chrome Plating	QQ-C-320 Type 1 Excellent hardness (RC68-74), wear resistance, and erosion resistance. Has low coefficient of friction, and is resistant to heat. Can be rendered porous for lubrication purposes. Class 1: .00001"-.00002" min thickness. Decorative plating usually over copper and nickel undercoats Class 2: Thickness as specified on drawing. Engineering plating. Class 2a: Thickness as specified on drawing. Post bake 375F for 3 hours. Class 2b: For parts below RC-40 and subject to static loads or designed for limited life under dynamic loads. Shot peening and post bake not required. Class 2c: For parts below RC-40 and designed for unlimited life under dynamic loads. Shot peen per MIL-S-13165. Class 2d: For parts above RC-40 and subject to static loads or designed for limited life under dynamic loads. Post bake at 375F for 3 hours. Class 2e: For parts above RC-40 and designed for unlimited life under dynamic loads. Shot peen before plate. Post bake at 375F for 3 hours. Service Condition 2, 3 & 4
Bright Nickel Plating	QQ-N-290 Class 1: for decorative application on steel, zinc, copper Grade A: .0016" thick Grade B: .0012" thick Grade C: .0008" thick Grade D: .0008" thick Grade E: .0006" thick Grade F: .0004" thick Grade G: .0002" thick Class 2: .003" thick - or as specified on drawing. Service Condition 2, 3 & 4
Black Nickel Chrome Plating	Service Condition 2, 3 & 4
Bronze Plating	Service Condition 2, 3 & 4
Electroless Nickel Plating	Def Stan 03-5 MIL-C-26074 Grade A: .001" min for steel. .001" min for iron and aluminium based alloys Grade B: .0005" min for copper, nickel, and cobalt based alloys. Class 1: as-plated (for decorative use and corrosion prevention) Class 2: Steel, copper, nickel, cobalt titanium-based alloys and any basis metal not adversely effected by heating. Class 3: Aluminium alloys non-heat-treatable and beryllium alloys processed to improve adhesion of the nickel deposit. Class 4: Aluminium alloys, heat-treatable, processed to improve adhesion of the nickel deposit.

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Cadmium Plating	QQ-P-416 TYPE I: No supplementary treatment. TYPE II: Supplementary chromate treatment. Best for corrosion resistance. TYPE III: Supplementary phosphate treatment. Used as a paint base. Class 1: .0005" min plating thickness Class 2: .0003" min plating thickness Class 3: .0002" min plating thickness Salt spray test TYPE II 96 hours - check for white corrosion products.
Zinc Nickel Plating	AMS 2417 Type 2
Zinc Plating	ISO 2081 (replaces BS 1706 and BS EN 12329) Def Stan 03-20 (replaces DTD 903D) MIL-STD-171 1.9.1, 1.9.2 BS 7371-3 (replaces BS 3382) ISO 4042 ASTM B633 TYPE I: No supplemental treatment. TYPE II: Supplemental Yellow Chromate treatment. The primary use of chromate finish on zinc is to retard or prevent formation of white corrosion products on zinc surfaces. TYPE III: Supplemental Clear Chromate treatment. The primary use of chromate finish on zinc is to retard or prevent formation of white corrosion products on zinc surfaces. TYPE IV: Supplemental phosphate treatment. The primary purpose of phosphate coating on zinc is to provide a paint base. CLASS SC4: .00098" very severe service environment CLASS SC3: .00051" severe service environment CLASS SC2: .00031" external cabinetry CLASS SC1: .00020" internal electronic hardware
24K Gold	MIL-G-45204
	TYPE I: 99.7% gold - used on most industrial applications. TYPE II: 99.0% gold - hard plate where wear is important. TYPE III: 99.9% gold - electronic applications. Class 00 - .00002" - decorative gold flash Class 0 - .00003" - decorative gold flash Class 1 - .00005" - over silver under plate Class 2 - .00010" - wave guides/contacts Class 3 - .00020" - standard engineering use Class 4 - .00030" - for corrosion/wear Class 5 - .00050" - for corrosion/wear Class 6 - .00150" - cathode emission