Common Specifications

These specifications are subject to change.

It is the responsibility of the customer to verify that the information is correct and current.

Black Oxide: Steel or Stainless Steel:

MIL-C-13924 Class 1 – Steel

Class 4 – Stainless Steel

MIL-DTL-13924 Class 1 – Steel

Class 4 – Stainless Steel

Steel or Stainless Steel: AMS 2485

Bright Nickel:

QQ-N-290 Class 1 – For Corrosion Protection

Class 2 – For Engineering Applications

Grade A: .0016 Thick
Grade B: .0012 Thick
Grade C: .0010 Thick
Grade D: .0008 Thick
Grade E: .0006 Thick
Grade F: .0004 Thick
Grade G: .0002 Thick

Dry Film Lube: MIL-L-46010

Electroless Nickel:

MIL-C-26074/ AMS 2404 Class 1 – As Coated

Class 2 – Steel or other Base Metals not Heat Treatable

Grade A: .0010 Thick Grade B: .0005 Thick Grade C: .0015 Thick

Class 3 – Beryllium Copper

ASTM B733 Type 1: No Requirement for Phosphorous

Type 2: 1-3% - SMFI DOES NOT DO THIS TYPE
Type 3: 2-4% - SMFI DOES NOT DO THIS TYPE

Type 4: 5-9%

Type 5: 10% and above – SMFI DOES NOT DO THIS TYPE

SC 0: Min. Thickness .000004

SC 1: .0002 SC 2: .0005 SC 3: .001 SC 4: .003

Passivate (Stainless Steel Only):

ASTM A967 AMS 2700

QQ-P-35 (Replaced w/ ASTM A967) AMS QQ-P-35 (Replaced w/ AMS 2700)

Spec 11200071 Code 2021 ASTM A380

IAW 79P050000, CODE 2041 (LOCKHEED) IAW 79P050000, CODE 2042 (LOCKHEED)

MIL-F-14072-300 E

Zinc:

ABB Spec 51042-A00 – Clear Zinc

51042-A01 – Yellow Zinc

51042-E01 – References QQ-Z-325C 83226GC/83125JM – Yellow Zinc (.0003) 83226GB/83125JM – Yellow Zinc (.0002)

ASTM B633-15 Type 1 – No Chromate

Type 2 – Color (Yellow) Chromate

Type 3 – Clear Chromate

Type 5 – Colorless Passivate (RoHS / Trivalent Clear Zinc)
Type 6 – Colored Passivate (RoHS / Trivalent Yellow Zinc)

SC 1/FEZN 5 .0002 Thick SC 2/FEZN 8 .0003 Thick FEZN 10 .0004 Thick SC 3/FEZN 12/13 .0005 Thick SC 4/FEZN25 .001 Thick

QQ-Z-325B/C Type 1 - W/Out Chromate

Type 2 – All Zinc (Incl. Clear)

Class 1 .001 Thick
Class 2 .0005 Thick
Class 3 .0002 Thick

Bake:

Grade 5 Steel – No Bake (under RC 31.2) Grade 8 Steel or Above – Bake Required

Zinc Plating – RC Higher than 31.2 Bake Required

E/N or B/N Plating - RC Higher than 31.2 Bake Required

Black Oxide - RC Higher than 40 Bake Required

Nickel Strike: S/S parts require a Nickel Strike for every process except Black Oxide.

Copper & Brass parts require a Nickel Strike for Electroless Nickel Only.