



Nadcap accredited, RoHS compliant, cutting-edge technology, stringent environmental compliance, strict quality control, super-fast turnaround, unsurpassed customer service and competitive pricing.

WET PAINT & PRIMER

Wide variety of pretreatments and primers can be combined with the top coats to achieve high performance engineered coating systems. Solvent and water based wet paint top coats offer a uniform, durable, high quality, and long-lasting finish. Unlimited color options available. Specializing in MIL SPEC Coating.

MIS-20007 APPROVED
CARC, DRY FILM LUBRICANTS AND MORE

SULFURIC ANODIZE

A cosmetic finish that protects aluminum from corrosion by forming an aluminum oxide coating on the top layer of the aluminum. Available in various dyes or clear.

MIL-A-8625
TYPE 2 CLASS 1 CLEAR
TYPE 2 CLASS 2 DYED (BLACK, RED, BLUE, GOLD, GRAY, OLIVE DRAB)

HARD COAT (HARD ANODIZE)

Similar to sulfuric anodize process, except the coating is very thick (0.002" average). This provides an aluminum oxide coating that protects the product from wear and tear better than any other finish.

MIL-A-8625
TYPE 3 CLASS 1 CLEAR
TYPE 3 CLASS 2 DYED (BLACK, RED, BLUE, GOLD, GRAY, OLIVE DRAB)

NICKEL PLATE

Bright electrolytic process used for corrosion protection and cosmetic appearance. Can be used as is, or as a base for decorative chrome, gold, or silver plating. Forms a protective barrier between the base material and corrosive elements.

QQ-N-290
GRADE A .0016" THK
GRADE B .0012" THK
GRADE C .0010" THK
GRADE D .0008" THK
GRADE E .0006" THK
GRADE F .0004" THK
GRADE G .0002" THK
CLASS 1 CORROSION PROTECTION

CONVERSION COATINGS FOR ALUMINUM

(CHROMATE OR CHEMICAL FILM)

A less robust finish for aluminum than anodization, providing some corrosion protection while allowing for conductivity. Excellent base for wet paint, powder coat, or other secondary applications.

MIL-DTL-5541
TYPE 1 CLASS 1A YELLOW CHROMATE
TYPE 1 CLASS 3 YELLOW CHROMATE
TYPE 2 CLASS 1A ROHS CLEAR
TYPE 2 CLASS 3 ROHS CLEAR

PASSIVATE

Recommended for cleaning and descaling stainless steel. This process removes any "free iron" contamination left behind on the surface of the stainless steel from machining and fabricating which could lead to premature corrosion.

AMS-2700
TYPE 6 NITRIC 2
TYPE 7 NITRIC 5
METHOD 1 CITRIC 1, 2, 3, 4
METHOD 2

ELECTROLESS NICKEL

Process that uses heat instead of electricity to bond the nickel to the substrate. This allows for even plating through the whole part. Contains phosphorous for a harder deposit than regular nickel plate. Excellent for putting a nickel deposit on aluminum, or as a base for chrome, gold, or silver. Can also process to AMS 2404.

| | |
|-------------------------------------|------------------------------|
| MIL-C-26074 | ASTM-B733 |
| CLASS 1 NO BAKE | CLASS 1 NO HEAT |
| CLASS 2 550° F 2 OR MORE HOURS. | CLASS 2 250-400°c |
| CLASS 3 375° F +/- 25°, 1-1.5 HOURS | CLASS 3 180-200°c, 2-4 HOURS |
| CLASS 4 200-260° F, 1-1.5 HOURS | CLASS 4 120-130°c, 1 HOUR |
| GRADE A .0010" MIN THK | CLASS 5 140-150°c, 1 HOUR |
| GRADE B .0005" MIN THK | SC0 .00004" THK |
| GRADE C .0015" MIN THK | SC1 .0002" THK |
| | SC2 .0005" THK |
| | SC3 .001" THK |
| | SC4 .003" THK |
| | TYPE 1, 4, 5 |

TIN PLATE

Bright or matte plating is used for soldering applications, soft and ductile compared to other finishes.

| | |
|-------------------------|-----------------------------|
| MIL-T-10727 | ASTM-B545 |
| TYPE 1 ELECTRODEPOSITED | SERVICE CLASS A .0001" THK |
| | SERVICE CLASS B .0002" THK |
| | SERVICE CLASS C .00032" THK |
| | SERVICE CLASS D .0006" THK |
| | SERVICE CLASS E .0012" THK |
| | SERVICE CLASS F .00006" THK |

COPPER

Shiny finish that can be buffed. Additional corrosion resistance as undercoat.

MIL-C-14550
CLASS 4 .00010" THK MIN
CLASS 3 .00020" THK MIN
CLASS 2 .00050" THK MIN
CLASS 1 .00100" THK MIN
CLASS 0 .001"-.005" THK MIN

INFORMATION CURRENT AS OF DECEMBER 2018



Quotes in 24 Hours

Our experienced team of estimators will work with you to determine what is the best quality and most economic process for your product.

Most quotes can be turned around in 24-hours. A shorter turnaround is possible for special orders.

POWDER COAT

Environmentally friendly process that provides excellent corrosion resistance. Uniform, durable, high quality, and long-lasting finish. Wide variety of colors, textures, and finishes.

MIL-PRF-32348
AAMA 2605 A

ZINC PLATE

An electrolytic process used for corrosion protection. Zinc is a sacrificial metal and so will begin corroding in place of the base substrate (steel). Various types of chromates are available in blue, yellow, black and RoHS compliant upon request.

| | |
|----------------------------|------------------------|
| ASTM-B633 | FE/ZN5 SC1 .0002" MIN |
| TYPE 1 ZINC ONLY | FE/ZN8 SC2 .0003" MIN |
| TYPE 2 ZINC BLACK | FE/ZN12 SC3 .0005" MIN |
| TYPE 2 OR 6 ZINC YELLOW | FE/ZN25 SC4 .0010" MIN |
| TYPE 2, 3, OR 5 ZINC CLEAR | |

ZINC-NICKEL PLATE

An alkaline alloy (12%-15% nickel to zinc) that is used in the protection of steel, copper, and brass. Recognized as an environmentally safe alternative to cadmium electroplating. Normally applied for corrosion protection purposes. Functions as a "sacrificial coating", corroding before the base material. Can be applied as is or with RoHS chromate (iridescent yellow rainbow appearance).

AMS 2417
TYPE 1 AS-PLATED WITHOUT SUPPLEMENTARY TREATMENT.
TYPE 2 AS-PLATED WITH SUPPLEMENTARY CHROMATE TREATMENT.
GRADE B NON-HEXAVALENT

GOLD

Coating provides good corrosion resistance and high tarnish resistance. Low contact resistance and good conductor. Excellent solderability.

| | |
|--------------------------|------------------------|
| MIL-G-45204 | CLASS 3 .0002" THK MIN |
| TYPE 1 99.7% GOLD MIN | CLASS 4 .0003" THK MIN |
| TYPE 2 99.0% GOLD MIN | CLASS 5 .0005" THK MIN |
| CLASS 00 .00002" THK MIN | GRADE C KNOOP 130-200 |
| CLASS 0 .00003" THK MIN | |
| CLASS 1 .00005" THK MIN | |

SILVER

Good corrosion resistance. Tarnishes easily. Hardness varies. Solderability is excellent but decreases with age. Best electrical conductor. Excellent lubricity and smear characteristics.

| | |
|------------------------------|------------------------------|
| QQ-S-365 | ASTM-B700 |
| TYPE 2 SEMI BRIGHT | TYPE 1 99.9% SILVER MIN |
| GRADE A WITH ANTI TARNISH | TYPE 2 99.0% SILVER MIN |
| GRADE B WITHOUT ANTI TARNISH | TYPE 3 98.0% SILVER MIN |
| | CLASS N WITHOUT ANTI TARNISH |
| | CLASS S WITH ANTI TARNISH |
| | GRADE D SEMI-BRIGHT |



Fast Turnaround

Speedy Standard Turnaround Production Time: Coating Systems has an average turnaround time on our customers' parts of 2-3 days.

24 Hour Special Order Production Turnaround Time: Our 2nd-shift production line allows us to turn around special orders in 24 hours or less.

Same Day Very Special Order Production Turnaround Time: Available by request for those last-minute, unexpected, got to have it today situations.

CHROME PLATE

A decorative plating with a nickel base, excellent corrosion protection.

QQ-C-320
CLASS 1 CORROSION PROTECTIVE PLATING
TYPE 1 BRIGHT FINISH

APPLIED GRAPHICS

Silkscreen, pad printing, and laser marking. Choose from a wide variety of colors, textures, and finishes!

MIL-STD-130

TEFLON

Applications for hardcoat anodize and electroless nickel. Commercial spray also available.

BRIGHT DIP

Anti-tarnish application for brass and other copper alloys. Traditional and non-chrome finishes available.

MIL-A-63576 TYPE 1
AMS 2482 TYPE 1

OTHER SERVICES

SANDBLASTING/BEADBLASTING

CUSTOM MASKING

LIGHT ASSEMBLY

LAB SERVICES

SPECIAL REQUESTS

SALT SPRAY TESTING

We continually expand capabilities and service offerings for all markets where metal finishing of high-quality products to tight tolerances is critical. Coating Systems is NADCAP certified, RoHS compliant, and ITAR/EAR compliant.

For special requests not listed on this chart or for more information about any of our processes, please call us at (978) 937-3712.

To Request a Quote or to Discuss which Process is Best for Your Needs Contact us at:

sales@coatingsystemsgroup.com

(978) 937-3712

FAX (978) 937-9506

