

Advanced Surface Technologies, Inc.

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Gold Plating

AST offers gold plating services for parts made from virtually any substrate ranging from aluminum to steel. Equipped with a number of rack plating and barrel plating equipment, accommodating gold plating, for small as well as large parts, is not a problem for us. As the gold plating process requires a controlled environment, we perform operations in an area with independent air systems, separated from other plating processes.

High performance hard gold plating for enhanced functionality as well as pure and soft gold plating for improved visual appeal plus cosmetic enhancement, is our specialty. Our gold plating services comply with different categories of specifications, such as MIL-G-45204, ASTM B488, and AMS 2422. Gold plating compliant to these specifications is also provided in different purity types - II, III, and I - as well as in a variety of hardness grades, ranging from 90 knoop to 201 knoop.

Our gold plating services cater to a wide range of industries and we have previously worked with the electronics and aerospace. With its resistance to oxidization, coupled with good electrical conductivity, our gold plating services are ideal for electrical contacts and other applications that involve sporadic electrical contact. We are committed to the environment, ISO14000 certified, and equipped with an advanced, computer-operated waste treatment system as well.

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CAPABILITIES

Substrates	Aluminum Brass Bronze Copper Magnesium Nickel Stainless Steel Steel Titanium Virtually Any Metal
Plating Capabilities	Barrel Plating Lines Rack Plating Lines
Additional Capabilities	Heat Treatment (Hardness and Hydrogen embrittlement) Masking Parts Stripping Parts-Cleaning Plugging
Underplating Options	Nickel
Standards Met	AMS 2422 ASTM B488 MIL-G-45204
Plating Thickness	Not less than 0.00005 in
Finish	Bright Matte

MIL-G-45204 SPECIFICATIONS

Purity	Type I - 99.7 % Gold Minimum, Hardness Grade A or C Type II - 99.0 % Gold Minimum, Hardness Grade C Type III - 99.9 % Gold Minimum, Hardness Grade A only
Hardness Grades	Grade A - Knoop hardness 90 Max Grade C - Knoop hardness 130-200 Inclusive

ASTM B488 SPECIFICATIONS

Purity	Type I - 99.9 % Gold Minimum, Hardness Grade A or C Type II - 99.7 % Gold Minimum, Hardness Grade C Type III - 99.0 % Gold Minimum, Hardness Grade A only
Hardness Grades	Grade A - Knoop Hardness 90 Max. Grade C - Knoop Hardness 30-200

AMS 2422 SPECIFICATIONS

Purity	99.0 % Gold Purity Minimum
Thickness	Not less than 0.00005 inch (50 Micro Inches / 1.27 µm) on all functional surfaces

ADDITIONAL INFORMATION

Applications	Barrels Connector Pins Electrical Switch Contacts High-Tech Electronic Components
Industries Served	Aerospace Automotive Communications Computer Electronics Household Appliances Medical Equipment Oil & Gas Equipment Pharmaceutical Recreational Equipment Solar Tool & Die
Certifications	ISO 14001 Certified ISO 9001:2000 Certified
Quality System Features	Dedicated to company-wide continuous improvement In-house laboratory facilities
Environmental System Features	State-of-the-art, computer-controlled waste treatment system
Professional Associations and Awards	<ul style="list-style-type: none"> • Charter member of the Strategic Goals Program, a cooperative effort between the metal finishing industry and EPA • Recipient of the Colorado Environmental Leadership Award <ul style="list-style-type: none"> • National Association of Metal Finishers (NAMF) • American Electroplaters and Surface Finishers Society (AESF)

Service Features

A staff that understands the importance of quick response for our customers
Production scheduling and production flexibility that minimize turnaround time