SURFACE TREATMENT SPECIALIST

AL FAIZAN METAL PRODUCTS COATING LLC

A Reliable Associate for Metal Plating keeping with your Demands

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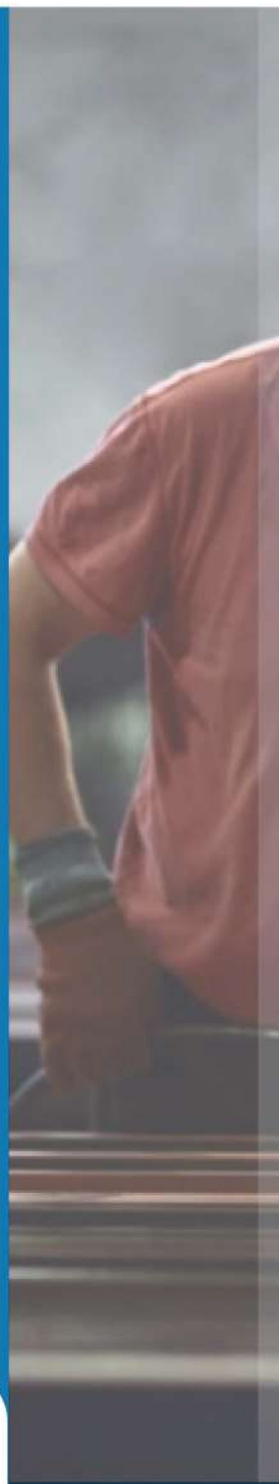


About Us

We are the market leader in the plating and quality powder coating sectors, providing engineered solutions in surface finishing for various demanding industries, including the medical, power transmission/ distribution, defense communications, and oil & gas markets. We offer decorative and practical solutions for a wide range of industries, from automotive to medical and dentistry plating finishes.
FMC offers surface finishing solutions, which combine nearly years of experience in metal finishing with an engineering focus. We are excited about the chance to work with our clients to extend their manufacturing services with the help of our finishing capabilities. We appreciate the opportunity to hear about your unique design problems and provide a metal finishing solution that will be delivered consistently and at a reasonable cost.

Our Director

Al Faizan Metal Products Coating LLC is owned and managed by Shahul Hameed. He has a rich and diverse experience in the electroplating field. He has an electrochemical engineering degree from CSIR-CECRI (the current number 1 research institute in India). Having 10+ years of experience in the metal coating field has supported him in developing a smooth, suave, and constructive relationship with executive colleagues, clients, suppliers, and individuals. As a Managing Director, he is responsible for the successful leadership and management of the organization based on the strategic goals set for the organization. He offers general management, manages day-to-day operations, and ensures a smoothly functioning, efficient organization.

Our Services

A phone call from one of our business consultants

A cost estimate of your project based upon your submission

An in-person meeting to discuss the finer details if necessary

100% privacy guaranteed, your details are safe and protected

- Gold Plating
- Silver Plating
- Powder Coating
- Tin Plating
- Nickel Plating
- Chrome Plating
- Zinc Plating
- Copper Plating
- Anodizing
- Passivation
- Conversation Coating
- Electroless Nickel Plating

Gold Plating

The application of a thin gold coating to another object's surface is known as gold electroplating. Gold is more expensive than many other plating materials, but its many better advantages frequently surpass this cost. Gold is durable and does not oxidize or undergo chemical reactions under normal circumstances. Because of this, gold plating is a superb option for many technical applications where design criteria include electrical conductivity, solderability, and corrosion resistance.

Standards Followed In FMC :

ASTM: B 253 - Aluminium Surface Preparation

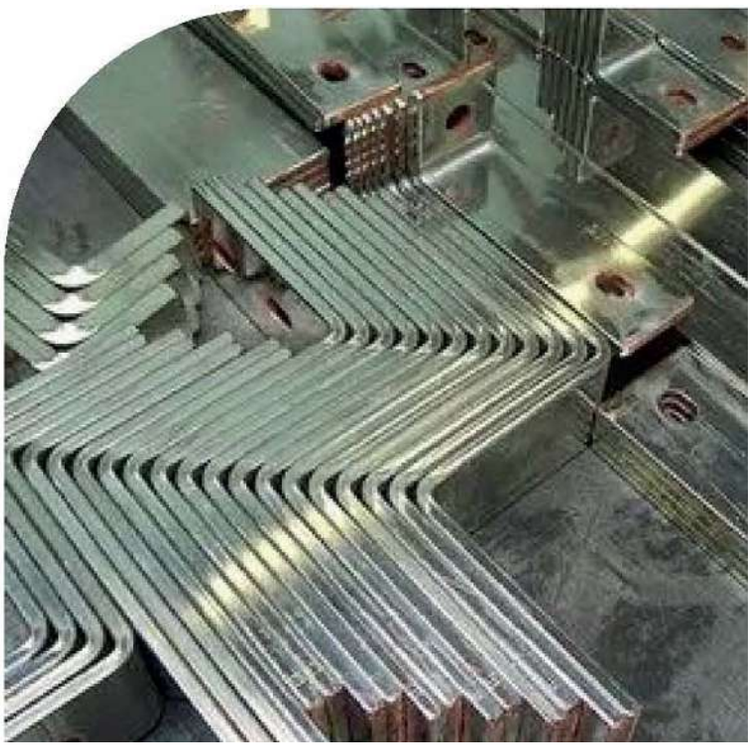
ASTM: B 488 - Electro-deposited Coatings of Gold

Silver Plating

With a dazzling white brilliance, silver is a very malleable metal. Due to its high electrical conductivity, silver is frequently used in semiconductors and electronics. Silver is crucial for light- and heavy-current engineering because it has the highest electrical conductivity of any metal. Silver is an economically cheaper metal plating that may be used than other precious metals. Silver can be used in place of lubricants by engine manufacturers due to its lubricity and excellent temperature resistance.

Standards Followed In FMC :

ASTM B700 - Electrodeposited Coatings of Silver for Engineering Use



Tin Plating

Tin is a white or silvery metal with a respectable level of corrosion resistance. Tin plating is the technique of using an electrical current to apply a layer of solderable tin on a material's surface. Materials including steel, stainless steel, copper, and copper alloys can all have tin plating. It may be incredibly economical because tin is significantly more affordable and widely accessible than precious metals like gold, platinum, or palladium.It is a typical coating for equipment used in the food processing industry due to its non-toxic qualities. Because of its excellent solderability and low melting point, tin plating is used in various industries, including the aerospace and automotive sectors.

Standards Followed In FMC:

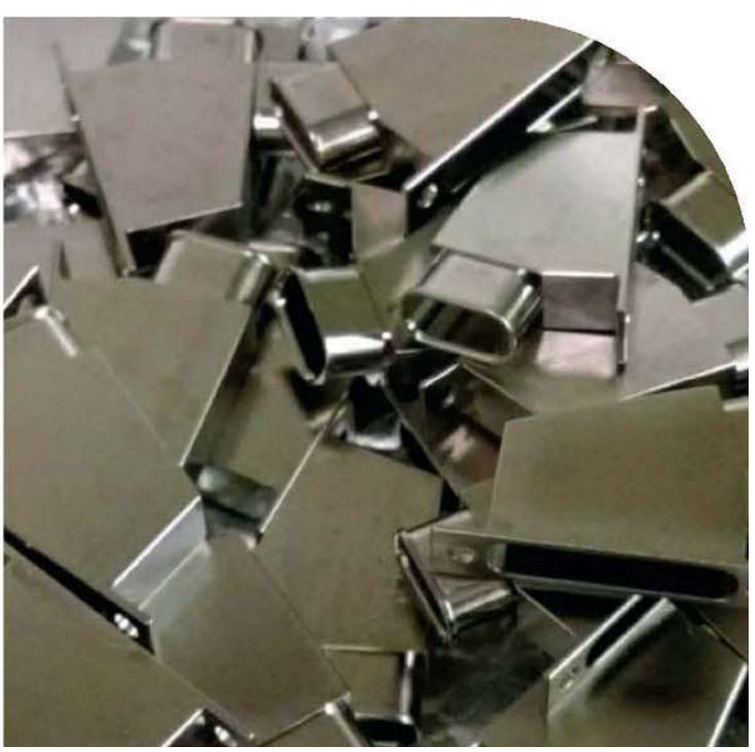
ASTM B545 - Electrodeposited Coatings of Tin

Nickel Plating

At FMC we do bright nickel plating - it is widely used for decorative and engineering applications. Deposits are mirror bright and have a smooth finish as well as excellent corrosion resistance. It is commonly used as an intermediate deposit and it is applied in contacts and connectors.
Several industries make use of nickel plating and take advantage of the improved strength and wear resistance that results from adding nickel to a material. Nickel plating is common in the automotive industry, for example. Nickel helps to increase the corrosion resistance of bolts used on vehicles, which are likely to be exposed to corrosive materials such as road salts.

Standards Followed In FMC:

ASTM: B 689 - Electroplated Engineering Nickel Coating



Powder Coating

Powder coating, a dry finishing method, has grown incredibly popular since its introduction in North America. The powder is used on various items for about 15% of the market for industrial finishing. For a high-quality, long-lasting finish, more and more businesses specify powder coatings, which enables increased production, better efficiency, and easier environmental compliance.Powder coatings are used as protective and ornamental finishes and come in an infinite variety of colors and textures. Additionally, thanks to technological improvements, they now offer excellent performance characteristics.

Chrome Plating

For several metal finishing purposes, chrome plating remains the preferred coating. Despite rivalry from other finishes, including organic coatings and vapor deposition, demand for chrome's bright and lustrous appearance is still rising. Chromium is frequently used for decorative and hard-chrome plating in the metal finishing industry. Because chrome plating offers a variety of surface qualities, including satin, diamond cut, hairline, spin, velour, semi-bright satin, and pearl pattern finishes, in addition to a mirror finish, each type of finish is used for the appropriate applications.

Standards Followed In FMC :

AS1M B650-	El.ectrodeposited Engineering Chromium coatings on Ferrous Sumtrates

Zinc Plating

In zinc plating, a thin zinc deposit is applied to a base metal. In various industries, corrosion can be an issue where the coating forms a sacrificial layer upon the metal that generally corrodes first. It means the original metal is protected and the zinc layer gets repaired and replaced when needed.Bright zinc plating can be a multi-step process that requires cleaning base metals with water washes and acids and then immersing the components in a zinc solution. It leaves a fine layer of zinc over the metal, giving it a bright finish. During this stage, the plated metal is passivated into a chromatic solution, adding protection and color. Plus, the top coat is sealed for great resilience. At FMC, we utilize a heat treatment process called de-embrittlement that prevents high-tensile steel from causing hydrogen embrittlement.

Standards Followed In FMC :

ASTM B633- Electrodeposited Coatings of Zinc on Iron and Steel

Copper Plating

The metallic element, copper, comes in red-orange with malleability, high electrical conductivity, and corrosion resistance. All these characteristics make copper an excellent choice for coating components in various industries, from automotive and aerospace to electronics and telecommunications. If you 're looking for a top-notch company that provides copper coating services with shortened lead times, lower costs, and produces superior-quality products, FMC can help. At FMC, we provide copper plating and electroplating services to suit your needs. We can apply a copper coating of different thicknesses to product types and their base materials.

Standards Followed In FMC :

ASTM: B 734 - Electrodeposited Copper for Engineering Uses

Anodizing

FMC anodizing can make sure that a part will resist wear and tear and corrosion from prolonged use, as it will retain its cosmetic appearance in all conditions. Some common types of anodizing are Type I-Chromic Acid Anodize, Type II-Sulfuric Acid Anodize, and Type III -Hardcoat. The anodic oxide structure of the aluminium substrate is wholly composed of aluminium oxide. The aluminium oxide cannot be applied like plating or painting to the surface, but it'll be completely integrated with the aluminium substrate, so it doesn't peel or chip. They have a porous structure, allowing secondary processes like sealing and colouring.

Standards Followed In FMC :

ASTM: B 253- Aluminium Surface Preparation

ASTM: B 322- Degreasing prior to Anodizing

ASTM: B 580 - Anodic Oxide Coatings on Aluminium

Conversion Coating

A chemical conversion coating is a treatment on metal surfaces that causes a chemical reaction at the metal's surface. This chemical reaction makes the metal surface a thin layer of protection. In contrast to anodizing, which results in non-conductive coatings, chemical conversion coating also maintains electric conductivity. Chemical conversion coatings are more economically produced than anodizing because they don't require electricity. Depending on your choice, it can be either colored or transparent. Chromatizing and chromate conversion are further terms for a chemical conversion coating. Due to various significant benefits over other existing coating techniques, the chemical conversion coating technology has been widely used to cover ordinary metallic materials to prevent corrosion.

Standards Followed In FMC :

MIL-D'IL-5541 - Chemical Conversion Coatings on Aluminum and Aluminum Alloys

Electroless Nickel Plating

The electroless nickel plating added to a metal surface follows an autocatalytic chemical reduction. This process doesn't use an outside source of electricity. Instead, electroless nickel plating uses a chemical bath for depositing a phosphorous or nickel layer onto the metallic surface. The surface coated in electroless nickel is used on non-conductive surfaces that allow the plating of base materials. This electro less nickel plating process improves the object's resistance and provides a uniform coating for high-precision parts that are applied to non-ferrous and ferrous surfaces. At FMC, we use electroless nickel plating that is compliant with Mil-C-2607 4E, ASTM B733, AMS 2404E, AMS 2404B, and other industry standards

Standards Followed In FMC :

ASTM B733 - Autocatalytic (Electroless) Nickel-Phosphorus Coatings on Metal

Passivation

Parts made of stainless steel can chemically be treated to give passivation, which offers resistance to rusting, oxidation and mild chemical assault. Free iron that can be produced during finishing operations like milling, lapping, cutting, polishing, etc., is removed from the surf ace of the parts by the passivation process. By returning the resistive qualities of machined components to the state of their particular alloy's raw material, the passivation process eliminates the danger of corrosive contamination.

Standards Followed In FMC :

ASTM A967 - Chemical Passivation Treatments for stainless steel parts

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