



Yüzey Kaplama Teknolojileri

**E-CATALOGUE**

# ALKALINE ZINC PLATING

Demand for the Alkaline Zinc Plating is increasing constantly, due to its maximum corrosion resistance on the metal part surfaces used for industrial applications, bright zinc plating on the wide current and being more economical than other methods. Our facility responds to automotive and general fasteners industry demands with a capacity of Alkaline Zinc Rack Plating 40 tons per day and Alkaline Zinc Iron Barrel Plating 35 tons per day. These systems that serve to obtain environmentally friendly clean surfaces, do not contain cyanide and harmful materials for the water. 100% homogeneous coating is provided thanks to the coating thickness distribution formula. Problems such as packness and residue that may occur in parts with complex shapes and blistering are not seen here. Also, it perfectly coats fractures and pores if they exist on metal surfaces. For efficient and long-lasting reliable corrosion protection, we also offer various lacquer and passivation options that can be applied over the zinc coating. Every work we do is analyzed and recorded in our laboratories, constantly.



- Lacquer Types
- Types of Cr<sup>+3</sup> Passivation
- Alcaline Zinc Plating
- Raw Material





# ALKALINE ZINC NICKEL PLATING

Alkaline Zinc Nickel Plating provides perfect adhesion and high corrosion resistance for the parts that work on high temperature. It supplies the highest corrosion protection especially for the red dust. It puts up higher wear resistance than other zinc alloy platings. They are suitable to use on hardened steels. It ensures to reach homogeneous coating thickness on every surface. It is an eco-sensitive plating by being cyanide free. We carry the plating that is suitable for the automotive standards with 12 tons daily and 12-15% nickel percentage at our Çinkosan surface coating closet facilities. For efficient and long-lasting reliable corrosion protection, we also offer various lacquer and passivation options that can be applied over the zinc nickel coating. Every work we do is analyzed and recorded in our laboratories, constantly.



- Lacquer Types
- Types of Cr<sup>+3</sup> Passivation
- Alcaline Zinc Nickel Plating
- Raw Material



# ALKALINE ZINC IRON PLATING

Alkaline Zinc Iron Plating is a highly efficient and easily applicable process used in the world industrial sector with high demands. Zinc-iron alloy provides perfect corrosion protection and smooth surface plating with its quality. The application process is eco-sensitive thanks to being cyanide free and rather than other zinc alloy platings, it is easier to purify water. Perfect coating thickness provides black and grey high corrosion protection for automotive and complex shaped pieces. Alkaline Zinc Iron Iron Barrel Plating is applied on our facilities with a capacity of 20 tons per day. For efficient and long-lasting reliable corrosion protection, we also offer various lacquer and passivation options that can be applied over the zinc nickel coating. Every work we do is analyzed and recorded in our laboratories, constantly.



- Lacquer Types
- Types of Cr<sup>+3</sup> Passivation
- Alcaline Zinc Iron Plating
- Raw Material





# MAGNI

Magni 565 is a two coat plating that does not contain chrome and consists of an organic base coat rich in zinc and an organic top coat rich in aluminium. Two coat plating systems are formulated to resist automotive fuels and fluids. This formulation offers perfect metal corrosion resistance on the connector sector, paintability, compliance of RoHS, WEEE and ELV environment regulations and low cost. Magni 365 is the plating of a leading global automotive producers' choice. Çinkosan is the Turkish representative of Magni Plating. With Magni 565, 50 tons production is carried out per day.



Top Coat (5-8 micron)  
Base Coat (8-10 micron)  
Raw Material



# ZINC PHOSPHATE PLATING

Zinc Phosphate plating is a plating method that provides perfect ground for the lubrication and painting processes although supplying short time protection for corrosion. The zinc phosphate plating that is applied for preparing a suitable surface for paint and iron steel and galvanized parts, gains the protective feature with the oils applied on it. Also, it contributes to paint's physical features and increases its impact resistance and flexibility. It is preferred in automotive, electronics, white goods, machine manufacturing, pipe, wire and various hand tools industries. The most appropriate plating method for the pieces that are used under the corrosive circumstances used before the powder coat and cathodesis plating. Also can be used indoors if the corrosion resistance is required. It can be light or dark grey depending on the plating duration. Also, this method increases paint quality 90% when used before the painting. The reason is that after the zinc phosphate plating, the rough layer is formed on the surface of the material. During the painting process, the paint starts to fill between the roughness of the material surface and a better precipitation is provided. After the paint dries, the surface is not scratched by any cutting tool or any impact. Zinc Phosphate Platings are applied on our facilities with a capacity of 10 tons per day.



Protective Lubricant  
Passivation  
Zinc Phosphate  
Raw Material



# MOLYKOTE

Molykote brand lubricants have been developed to eliminate lubricant problems in the automotive industry. Molykote provides more economic conditions on the production and longevity in the usage, dry and clean lubrication that is not affected by the dust, dirt and moisture, life time usage against aging, evaporation and oxidation, protection against rust on surfaces without surface treatment such as galvanization, non-metal and plastic, fireproof protection, controlled coating thickness compared to other lubricants. Plating provides entire surface smoothness and optimizes friction under extreme load and operating conditions for metal-metal, metal-plastic or plastic-plastic. Molykote chemicals consist of a mixture of resin and solvent, and there are solid oil particles dispersed in this mixture. These are MoS<sub>2</sub> (molybdenum disulfide), graphite or PTFE fats. Each chemical is customized for the concentrations of these oils to serve the industry's various coating needs. Çinnkosan is the Turkey representative of Molykote Coating and serves with Molykote® 3400A and Molykote® D-708 chemicals.

Molykote 3400A Anti-Friction Coating is a solid and dry lubricant that is used as an anti-corrosion agent for automotive, construction and farming equipment appliances. It is also used as a lubricant for applications in polluted environments, at low speeds, subject to high loads and re-equipment. Molykote 3400A has perfect lubrication and corrosion protection, good solvent resistance, high load carrying capacity, excellent adhesion to metal, low coefficient of friction, high resistance to oil and fuel features. This product is widely used in parts such as car lock mechanisms, lock parts and door hinges.

Molykote D-708 anti-friction is a dry and wet lubricant material that is used for protecting composites such as plastic/metal and metal/metal at the low and middle loads. This advanced material has perfect protection for corrosion and low coefficient of friction. Also, this product is suitable for automotive appliances such as seat belt parts, door lock mechanisms and door parts, disc brake springs, springs, hinges, bolts, pins and washers.





# ZINTEC

Zintec platings are labels that have lamellar microstructure high in zinc and aluminum and provide cathodic protection against corrosion coated on the metal surfaces without current. It gives away itself in a corrosive environment by providing cathodic protection. Zintek plating ensures high corrosion resistance. Their performances can be increased with the plating without current coated on it. Suitable for use with the hardened steels. Electro-galvanized steels have tensile strength higher than 800 MPa pose a risk of hydrogen embrittlement, as a result, stress corrosion. Zintek platings have no risk of hydrogen embrittlement because of having a plating method without current and do not meet the acid during the pretreatment. It is preferred as an alternative of electrolysis plating providing cathodic protection and zinc alloy and zinc platings because of their hydrogen embrittlement. Thanks to the zero risk of hydrogen embrittlement, it can be used safely with hardened steels by entering the hydrogen atom easily. Heat treatment steps are not required to remove hydrogen embrittlement after electroplating. There is no extra heat treatment cost. It can be given different colors and coefficient of friction on the surface. Does not cause waste water. They are environmentally friendly and comply with the regulations such as RoHS, WEEE, EU. Çinkosan is the Turkey representative of the Zintec Plating. It carries out 50 tones of daily production with Zintek 200 and Zintec 300B.

## ZINTEC 200

Zintec 200 is the product of ATOTECH Germany and is a zinc flake plating chemical. Zintec 200 is a base coat that is grey. With the top coats applied on Zintec 200 that is applied as a base coat on our company, desired friction coefficient range and red rust resistance exceeding 1000 hours can be supplied.

## ZINTEC 300B

Zintec 300 B is a zinc flake plating chemical that is the product of ATOTECH Germany company. Zintec 300B is a base coat that is black. The black color gained as black top coat that is applied on the silver color base coat applied in the current appliances. Grey base coat can be seen as a result of impact and frictions. With our process developed to eliminate this problem, we can obtain both corrosion resistance and homogeneous black plates.

## INORGANIC TOP COATS

Zintec Top is a CR-free mineral top coat. It is water based and reactive and increases corrosion resistance and mechanical features. Has a thick layer ( 0,5 – 1µm). Also, we can obtain the desired friction coefficient range with our inorganic lacquer applications with lubricant content; we have lacquer appliances such as Zintek Top LV → 0,09 – 0,15 Zintek Top LF → 0,12 – 0,18, etc.

## ORGANIC TOP COATS

Techseal Silver WL: Organic, CR(VI) free, silver color top coat. It is water based and increases chemical stamina. Techseal Black SL: Organic, CR(VI) free, black color top coat. It is solvent based and increases chemical stamina. We carry out all our applications on the ZT 16 PLANETARY SYSTEM machine that is bought from Spain. Thanks to this application, we can prevent the problems such as imbus and torque filling, interdental accumulation that are considered as a fault in the sector.



Top Coat Types  
Base Coat Grey (Zintec200)  
Raw Material



Top Coat Types  
Base Coat Black (Zintec300B)  
Raw Material





## CONTACT INFORMATION



İkitelli Organize Sanayi Bölgesi, Galvano Teknik  
Sanayi Sitesi, Galvano İş Merkezi Kat:7 Başakşehir/  
İSTANBUL



Tel: 0212 549 16 21 (pbx)



Fax: 0212 549 13 97



[www.cinkosan.com](http://www.cinkosan.com)



[info@cinkosan.com](mailto:info@cinkosan.com)