

# 高防腐蚀性电镀系列

## High Anti-Corrosion Plating Series



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ZINKO™ 锌及锌合金电镀系列符合欧盟环保 RoHS 及 EOLVD 的规范，其核心是提高工件的防腐能力和耐磨性能，功效显着，媲美六价格。使用此系列电镀可得到光亮美观的镀层，配合同一体系的钝化剂及封闭剂，更能形成双重保护；尤其适用于汽车配件、紧密固件、五金组件等制造业。

ZINKO™ Zinc & Zinc Alloy Plating Series has a remarkable capability of abrasion and corrosion resistance as well as forming mirror bright deposits on work pieces. This series fully complies with the international environmental regulations, i.e.: RoHS and EOLVD; therefore is ideal for various industries, such as automotive, fasteners, hardware, etc.



## 前处理系列 Pre-Treatment Series PROCLEANER™

### PROCLEANER™ 1101 不含磷碱性浸洗剂 Phosphorous-Free Alkaline Soak Clean Agent

PROCLEANER™ 1101 为一种多用途的不含磷碱性浸洗剂；特别为清洗钢件而设计，最适宜用于除油脱脂除腊等；可用于滚镀操作和在磷化处理前；也可用于清洗青铜和红铜(可能会使此类金属失去少许光泽)。它含有大量湿润剂，容易用清水冲洗干净；于低温操作同样有效；其它 PROCLEANER 电解除油清洗剂被带入也不会影响性能；废水处理简单。

- Free of Phosphorous
- Effectively removes all kinds of oil, was and grease on steel substrates
- Applicable to barrel plating and pre-phosphorous process
- Can be used on bronze substrates (possible to cause color to slightly lose its glossiness)
- Contains lubrication/ wetting elements
- Operable at low temperature; unaffected by drag-out of other cleaning agents
- Easy waste treatment

### PROCLEANER™ 1283 不含磷碱性电解除油剂 Phosphorous-Free Alkaline Electrolytic Degreasing Agent

PROCLEANER™ 1283 为一种效率高，不含磷的碱性电解除油剂；专为活化镀锌件而设计，能用于洗涤钢、铜及黄铜；可用作阴极或阳极电解除油；其碱浓度非常低，不会侵蚀铸件，也减低了发黑现象；本工艺因不怕硬水及很容易用水冲洗干净，所以最适宜全自动生产线。生产操作者可用非常广泛的电流密度范围操作，浸洗时间长也不会影响金属机体；本产品独特的配方有高度洁净性能，不起泡沫；PROCLEANER™ 1283 可以彻底洗涤未经打磨的铸件及已打磨的锌件。

- Free of Phosphorous
- Best fit for activated zinc workpieces; applicable on steel, copper and brass
- Suitable for both anode and cathode electrolytic cleaning
- High degreasing performances
- Would not cause corrosion and blackening to workpieces due to its low alkalinity
- No corrosion on zinc substrates even for long period of soak cleaning
- Compatible with Hardwater
- Easy cleaning proces



## 前处理系列 Pre-Treatment Series PROCLEANER™

PROCLEANER™ 1220EC 多功能低温电解除油剂 Multi-Purposed Cryogenic Electrolytic Degreasing Agent

PROCLEANER™ 1220EC 适用于清洗钢、铜及黄铜；它既可以用作阴极除油，也可用作阳极除油。

- Suitable for steel, copper and brass
- Applicable for both anode and cathode degreasing

## 光亮镀锌

### Bright Zinc Plating

ZINKO™ AZ-63 酸性光亮镀锌工艺 Cyanide-Free Bright Acid Zinc Plating Process

ZINKO™ AZ-63 的镀层可达全面光亮；镀液稳定，空易控制，操作温度范围可高至 45 度，不影响光亮度；电流密度范围宽阔；沉积速度特快，电镀时间因而缩短，生产量可提升 150% 或以上。

- Stable solution, easy to manage
- Mirror bright deposits tolerate high temperature (up to 45°C)
- High plating speed reduce plating time and increase productivity up to more than 150%

ZINKO™ NZ-73 碱性无氰光亮镀锌电镀工艺 Cyanide-Free Bright Alkaline Zinc Plating Process

ZINKO™ NZ-73 是一种不含任何螯合剂的环保镀锌工艺，可用于挂镀和滚镀；镀液覆盖度佳及分布均匀；镀层光亮、防腐能力强、低应力及延展性良好；镀层进行铬钝化处理后可得到蓝、彩虹、绿及黑等美观的钝化膜颜色，适用于多种生产线。



- Suitable for both barrel plating and rack plating
- Excellent ductility, leveling and covering power
- Anti-corrosion mirror bright deposit
- Form beautiful blue, iridescent and black passivation coating on deposit, suitable for various productions

## 锌铁合金电镀

### Zinc/Iron Alloy Plating

#### ZINKO™ NZ-Fe 83 碱性无氰锌铁合金电镀工艺 Alkaline Zinc/Iron Alloy Plating Process

Zinko NZ-Fe 83 的合金分散力极佳，镀层平滑均匀；镀液操作简单且范围宽广；适用于三价铬钝化进行后处理及符合电镀后处理的相关性质；滚镀和挂镀皆可。

- Uniform alloy and deposit distribution
- Wide working range, simple operation
- Exceptional post plate deformation characteristics
- Suitable for Rack & Barrel Plating



## 锌镍合金电镀

### Zinc/Nickel Alloy Plating

#### ZINKO NZ-Ni 93 碱性无氰锌镍合金电镀工艺 Alkaline Zinc/Nickel Alloy Plating Process

Zinko NZ-Ni 93 是专门为了迎合市场需求而开发的碱性锌镍合金电镀工艺，其含镍量高，为 12 - 16%，此工艺所得镀层耐腐蚀能力强，镀层分散力良好，并有效提升其防腐能力，且对其后的钝化热处理工序有极佳的容忍性，特别适用于三价铬钝化；滚镀和挂镀皆可。



- High Nickel content: 12 - 16%
- Good deposit distribution
- Excellent resistance to corrosion and heat
- Particularly ideal for Trivalent Passivation
- Suitable for Rack & Barrel Plating

## 三价铬五彩钝化

### Trivalent Iridescent Passivation

#### ZINKO™ TriCr-511/ 513/ 515 三价铬五彩钝化 Trivalent Iridescent Passivation Process

ZINKO™ TriCr-511/ 513/ 515 是一系列不含六价铬和氟化物之溶液，具有卓越的耐蚀能力，并可通过“热冲击”测试；染色效果良好，其淡五彩皮膜层，当使用适当的封孔剂可得淡银色状之外观，类似黄色铬皮膜；其钝化膜的抗腐蚀性能与六价铬黄钝相当；低温操作，杂质容忍量高，使用寿命长；适用于碱性、氯化物和氰化镀锌沉积层之后处理。

- Fine beautiful iridescent passivation coating
- Free of cyanide and hexavalent chromium
- Outstanding corrosion resistance
- Meet the “Heat-Impact” standard
- Operate under low temperature
- Durable and high tolerance in metal impurities;
- Same anti-corrosion ability as hexavalent passivation
- Light silver surface after applying an appropriate post-treatment sealer
- Suitable for the post-treatment passivation of alkaline, chloride and cyanide zinc deposit.

## 三价铬蓝白钝化

### Trivalent Blue Passivation

#### ZINKO™ TriCr-311/ 313/ 315/ 317 三价铬蓝白钝化 Trivalent Blue Passivation Process

ZINKO™ TriCr-311/ 313/ 315/ 317 的三价铬蓝白钝化均能镀出一层不含六价铬的漂亮蓝色铬保护层；抗腐蚀性能力及抗热冲击处理能力极佳（能通过 72 - 1000 小时的红锈盐务测试）；单一添加剂的使用方法、操控及维护简易；镀液杂质容忍量高，使用寿命长；特别适用于碱性、氯化物和氰化镀锌沉积层之后处理。

- Suitable for the post-treatment passivation of alkaline, chloride and cyanide zinc deposit
- Excellent heat & corrosion resistance: Passed 72 - 1000hrs Salt Spray Test
- High Tolerance for metal impurities
- Beautiful blue passivation coating
- Free of hexavalent chromium
- Durable and easy to manage



## 三价铬黑锌钝化

### Trivalent Black Passivation

#### ZINKO™ TriCr -711A/ 711B/ 712 三价铬黑锌钝化 Trivalent Black Passivation

ZINKO™ TriCr -711A/ 711B/ 712 是一系列不含六价铬的皮膜处理系列，可用于锌层、锌铁层及锌镍层上；其皮膜色泽黑而均匀，甚少出现起彩的情况；配合 ZINKO™ 纳米封闭剂使用，更可得到油光效果及提升其防腐能力。



- Free of Hexavalent Chromium
- Fine & uniform black coating
- Suitable for Zinc, Zinc-Iron & Zinc-Nickel Plating
- For shiny black coating and higher corrosion resistance, apply it with ZINKO™ Nano Sealer

## 纳米封闭剂

### Nano Sealer

#### ZINKO™ 纳米封闭剂系列 Nano Sealer Series

水溶性封闭剂 Water-Soluble Sealer: ZINKO™ 100/ 200

溶剂性封闭剂 Solvent Sealer: ZINKO™ 300/ 400/ 500

ZINKO™ 纳米封闭剂为一类有机-无机杂化涂覆液，与基体材料有很好的粘结力及能在基体表面形成一层光亮均匀的透明涂膜，而其涂膜具有很强的耐蚀性、抗指纹性及耐磨性。操作简单，可用于浸涂、喷涂或辊涂；根据不同的覆涂条件，涂层可达到 1-3 微米的厚度，并使钝化后的工件之防腐性能提高 20-40 倍，中性盐雾测试最高可达 2000 小时。

ZINKO™ 200 为常规水性树脂，它能够调整工件表面摩擦系数的涂层。摩擦系数可调节范围为 0.08-0.15。

- Organic-inorganic Nano-coating process
- High capability of corrosion, fingerprint and abrasion resistance
- Bonds well with the substrates
- Capable of forming a thin shiny transparent layer on the surface of the substrates
- Simple operation, applicable for dipped coating, spray coating and spin coating
- Based on different requirements, coatings could be as thin as 1 - 3µm and are capable of passing maximum 2000 hours of salt spray test
- ZINKO™ 200 is a regular waterborne resin which tolerates a wide range of torque tension from 0.08 - 0.15. It is ideal for various kinds of screws.

# Know How, Can Do.



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