

Euphoria[®]

AVRASYA SURFACE CHEMICALS

www.avrasyaexport.com



INDEX

Correct Choice for Surface Technologies	5-6
Our Service Fields	7-8
Basic (Raw) Chemicals	9
Auxiliary Chemicals	10
Anode Types	11-12
Cleaning Systems	13-14
Industrial Cleaning Chemicals	
Cyanide Copper Plating Process	15-16
Acid Copper Plating Process	
Decorative Nickel - Chrome Plating Process	17-20
Eco - Friendly Decorative Process	21-22
+3 Decorative Chrome Plating Process	
Cyanide Free Alkaline Copper Process	
Cyanide and Acid Zinc Plating Process	23-24
Environmental Friendly Functional Zinc Plating	25-26
Cyanide - Free Alkaline Zinc Plating Process	
Lacquers (Top Coats) and Passivations on Zinc and Zinc Alloys Platings	27-28
Black Passivations and Top Coats on Zinc and Zinc Alloys	29-30
Silver Plating Process	31-32
Electroless Nickel Plating Process	33-34
Hard Chrome Plating Process	35-36
Plating on Plastics	37-38
Special Processes	39-40
Electrophoretic Lacqier	41-44
Phosphate Processes	45-46
Nano Scale Phosphate Alternative Surface Treatmenr Process	47-48
New Patend Passivation Technology for Aluminium and Alloys	49-50
Anodising Processes	51
Protection	52
Our Instrumental Analyzing Capability	53-54
Customer and technical Services	55-56
Laboratory	
Warehousing	57-58
Warehousing Spaces	
Plating Bath Heaters	59
Cooling Systems	
Titanium Baskets, Titanium Hooks and Anode Bags	60
Filter Systems	61-62
Filter Cartridges	
Pumps	
Photoes from Exhibitions That We Participate	63

CORRECT CHOICE FOR SURFACE TECHNOLOGIES

- Customer cooperation with solidarity
- High quality and performance guaranteed for the products that we developed or imported
- Wide range of products with wide pallet of processes
- Superior saving stemming out of a perfect performance meeting with lower costs
- Customer focused and quick services, emergency solutions
- Technical superiority on processing fields
- Minimum effect on the environment with recyclable products
- Products that formulized and produced with analyzable and harmless materials

Harmless industrial cleaning chemicals for all metals and metal applications, which are produced with the latest technologies and with the formulation of biological fragmentation

Zinc layers with perfect metal distribution that does not contain cyanide; full design (automatic process control) consisting inert anodes, catalyst coated baskets and zinc generator

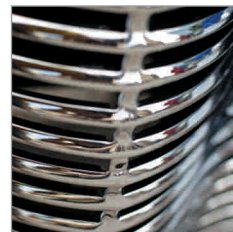
Recyclable modular cleaning systems with surfactant components and materials

Three valent chromium passivation systems which does not contain carcinogenic and toxic ingredients for zinc and zinc alloy platings

Cleaning and pickling chemicals, inhibitors, additions and passivations for steel industries

High performance decorative plating processes, cyanide free copper plating, high bright and levelling acidic copper, semi- bright nickel, ductile bright nickel and chrome plating with micro cracks

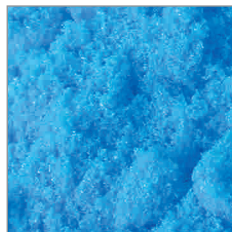




OUR SERVICE FIELDS

- Chemicals for plating on ABS
- Chemicals for electroless nickel plating
- Chemicals for plating Alkaline zinc-iron
- Chemicals for plating Alkaline zinc
- Chemicals for plating Alkaline zinc-cobalt
- Chemicals for plating Alkaline zinc-nickel
- Chemicals for plating gold
- Cr +3 based passivations on aluminum
- Antique chemicals
- Antracid nickel plating chemicals
- Acidic copper plating chemicals
- Acidic zinc plating chemicals
- Cr +3 based passivations on zinc
- Cr +6 based passivations on zinc
- Decorative bright chrome plating chemicals
- Cr +3 decorative chrome plating chemicals
- Electrophoretic lacquer
- New technology process applications alternative to phosphating
- Free nickel plating chemicals
- Silver plating chemicals
- Plating bath
- Lacquering chemicals
- Matt tin plating chemicals
- Palladium plating chemicals
- Bright tin plating chemicals
- Bright nickel plating chemicals
- Platinum plating chemicals
- Rectifiers
- Rhodium plating chemicals
- Ruthenium plating chemicals
- Plating chemicals
- Satin nickel plating chemicals
- Hard chrome plating chemicals
- Black free nickel plating chemicals
- Black chrome plating chemicals
- Black nickel plating chemicals
- Cyanide copper plating chemicals
- Cyanide zinc plating chemicals
- Alkaline copper without cyanide plating chemicals
- Stripping chemicals
- Cleaning chemicals
- Semi-bright nickel plating chemicals

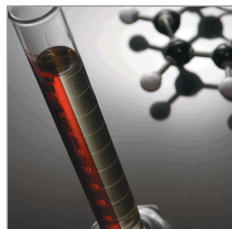




BASIC (RAW) CHEMICALS

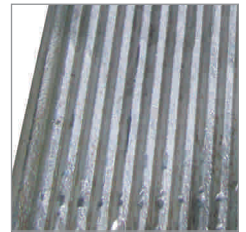
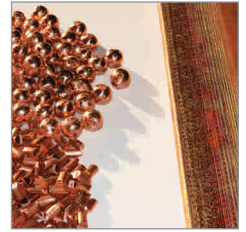
OUR COMPANY IMPORTS AND SELLS PRODUCTS

- Nickel Sulphate
- Nickel Chloride
- Chromic Acid
- Sodium Cyanide
- Copper Cyanide
- Zinc Cyanide
- Tin Sulphate
- Tin Chloride
- Nickel Carbonate
- Nickel Sulphamate
- Nickel Nitrate
- Nickel Acetate
- Boric acid
- Activated Carbon
- Ammonium Chloride
- Ammonium Fluoride
- Ammonium Bifluoride
- Ammonium Thiocyanates
- Ammonium Molybdate
- Copper Carbonate
- Copper Chloride
- Zinc Chloride
- Zinc Oxide
- Zinc Sulfate
- Copper Nitrate
- Potassium Silver Cyanide
- Silver Cyanide
- Nitrate silver
- Potassium Gold Cyanide
- Sodium Hypophosphite
- Sodium Saccharin
- Sodium Bichromate
- Sodium Fluoride
- Sodium Bifluoride
- Sodium Molybdate
- Potassium Sodium Tartrate
- Sodium Stannate
- Sodium Metasilicate
- Sodium Metabisulphide
- Sodium Sulphide
- Caustic soda
- Potassium dichromate
- Potassium Chloride
- Potassium Thiocyanate
- Potassium Hydroxide
- Potassium Carbonate
- Cobalt Sulfate
- Cobalt Chloride
- Cobalt Nitrate
- Cobalt Acetate
- Cobalt Hydroxide
- Thio Urea
- Trisodium Phosphate
- Potassium polysulphide
- Fluoroboric Acid
- Iron 3 Chloride
- Lead Fluoroborat
- Barium Chloride
- Selenium Dioxide
- Tin Pyrophosphate
- Copper Sulphate



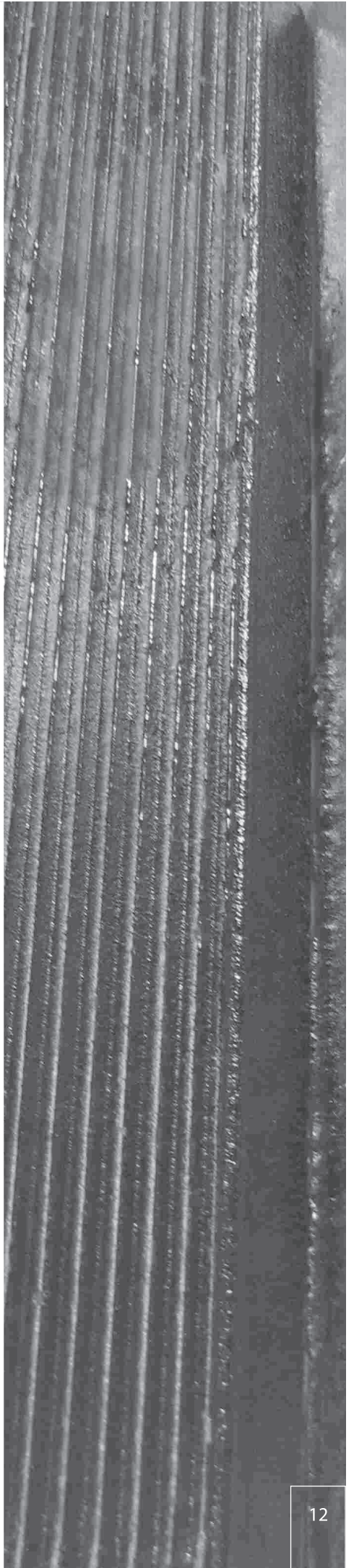
AUXILIARY CHEMICALS

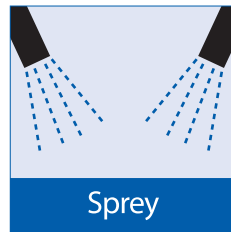
- Soak cleaning
- Electrocleaning
- Acidic Degreasing
- Ultrasonic Degreasing
- Spray Degreasing
- Neutral degreasing
- Carrier for cyanide copper electrolytes
- Brightener for cyanide copper electrolytes
- Carrier for cyanide-free copper electrolytes
- Brightener for cyanide-free copper electrolytes
- Acid Copper Brightener
- Acid Copper Wetting agent
- Nickel Brightener
- Nickel Carrier
- Nickel Corrector
- Nickel Wetting agent
- Nickel Purifier
- Nickel leveller
- Semi-Bright Nickel Carrier
- Semi-Bright Nickel Brightener
- Semi-Bright Nickel Wetting agent
- Satin (Pearl) Nickel Carrier
- Satin (Pearl) Nickel Corrector
- Satin (Pearl) Nickel Brightener
- Black Nickel Salts
- Antrasit Nickel Salts
- Electroless Nickel Make-up
- Electroless Nickel reductor
- Electroless Nickel stabilizer
- Cr +3 Chrome Plating Chemicals
- Decorative Chromium Catalyst
- Hard Chromium Catalyst
- Black Chromium Catalyst
- Chrome Defoamer
- Cyanide Zinc Brightener
- Acid Zinc Carrier (make-up)
- Acid Zinc Brightener
- Alkaline Zinc Carrier
- Alkaline Zinc Brightener
- Alkaline Zinc Purifier
- Alkaline Zinc water conditioner
- Alkaline Zinc - Iron Carrier
- Alkaline Zinc - Iron Brightener
- Alkaline Zinc - Nickel Brightener
- Alkaline Zinc - Nickel, nickel additive
- Alkaline Zinc - Nickel complexing agent
- Alkaline Zinc - Nickel LCD booster
- Alkaline Zinc - Nickel Carrier
- Blue Passivation on Zinc Alloys (Cr +6), (Cr +3)
- Yellow Passivation on zinc Alloys (Cr +3)
- Black passivation on Zinc Alloys (Cr +6), (Cr +3)
- Yellow Passivation on zinc Alloys (Cr +6)
- Olive drap Passivation on Zinc (Cr +6)
- Water-Based sealers
- Free Nickel (White Bronze) Make-up
- Free Nickel (White Bronze) Carrier
- Free Nickel (White Bronze) Brightener
- Black Free Nickel Make-up
- Black Free Nickel Maintenance
- Acid Tin make-up
- Acid Tin corrector
- Acid tin brightener
- Silver Corrector
- Silver Carrier
- Silver Brightener
- Brass make-up salt
- Palladium activator for ABS (Plastic)
- Neutralizing for ABS (Plastic)
- Electroless nickel for ABS (Plastic)
- Acid Gold Process
- Ruthenium Processes
- Rhodium Processes
- Platinum Process
- Electrophoretic lacquer Process
- Varnish, Lacquer and Paint Removal
- Nickel stripping from brass
- Nickel stripping from steel
- Nickel stripping from zamak
- Nickel electrolytic stripping
- Blackening on brass
- Blackening on Copper
- Blackening on zamak
- Blackening on nickel
- Blackening on silver
- Cr +3 passivation on Aluminum
- Phosphate-Free metal pre-treatment chemicals
- Palladium Activation Chemicals
- All Manufacturing Raw Materials



ANODE TYPES

- Nickel Anode
- Phosphorous Copper Anode
- Electrolytic Copper Anode
- Oxygen Free Copper Anode
- Zinc Anode
- Brass Anode
- Tin Anode
- Platinized Titanium Anode
- Graphite Anode
- Cadmium Anode
- Lead Anode

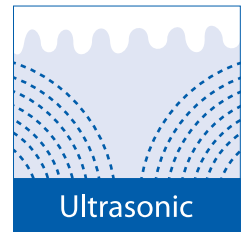




Sprey



Dipping



Ultrasonic

CLEANING SYSTEMS

Different Mechanisms of Cleaning, can be seen in very short time without agitation.

Emulsifying Cleaning Systems

- It is possible a single product
- Easy bath make-up
- Easy usage
- Limited life time due to the amount emulsified oil.

Demulsifying Cleaning Systems

- Liquid products, modular system
- Perfect for oil separation with micro / ultra filtration
- The opportunity to work with zero waste water
- Cleaning with always known oil content

INDUSTRIAL CLEANING CHEMICALS

- Hot degreasing
- Electro-cleaning
- Ultrasonic degreasing
- Spray degreaser
- Neutral degreasing
- Acidic degreasing
- Inhibitors
- Temporary corrosion protection chemicals



The part is almost clean, surrounded by turbid solution



Oil film removed, solution is clear



Emulsified oil drops are dissolved in the solution



Big oil drops are left on few points



Oil is getting dissolved



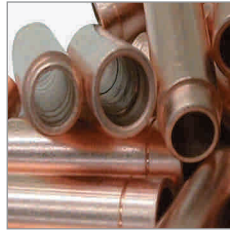
Oil starts to leave the surface upwards



Dissolution starts from the part



Short after dipping, removing starts



CYANIDE COPPER PLATING PROCESS

Low expense additional system,
Excellent metal distribution
Semi bright to full bright layers,
Easy process control

Can work with lower copper content
Pre Nickel-bright surface
Suitable for rack and barrel
Sodium or potassium based

PROCESSES

- Cyanide copper brightener,
- Cyanide copper carrier.

ACID COPPER PLATING PROCESS

Excellent levelling
High-throwing power
Mirror bright finish
High-performance, low current density
Low cost addition system

Suitable for barrel and barrel
Pitting free
Economic operating costs
Different colors of the additives

PROCESSES

- Acid copper make-up,
- Acid copper leveling,
- Acid Copper Brightener.





DECORATIVE NICKEL-CHROME PLATING PROCESS

BRIGHT NICKEL PLATING PROCESS

- High levelling
- Excellent brightness and whiteness
- Chrome plateability
- Low labor cost

Nickel Brightener
Nickel carrier / corrector
Nickel wetting agent
Nickel-leveller
Nickel purifier

SEMI-BRIGHT NICKEL PLATING PROCESS

- Ideal corrosion potential comparing to bright nickel
- Economic Process
- Chrome plateability
- Low labor cost

Semi-bright nickel carrier
Semi-bright nickel
Semi-bright nickel-wetter

SATIN NICKEL PLATING PROCESS

- Homogeneous satin layer
- Economic process
- Good adhesion to base metal
- Good chrome plateability
- The adjustable satin effect

Satin nickel brightener
Satin nickel corrector
Satin nickel carrier



DECORATIVE NICKEL-CHROME PLATING PROCESS

BLACK NICKEL PROCESS

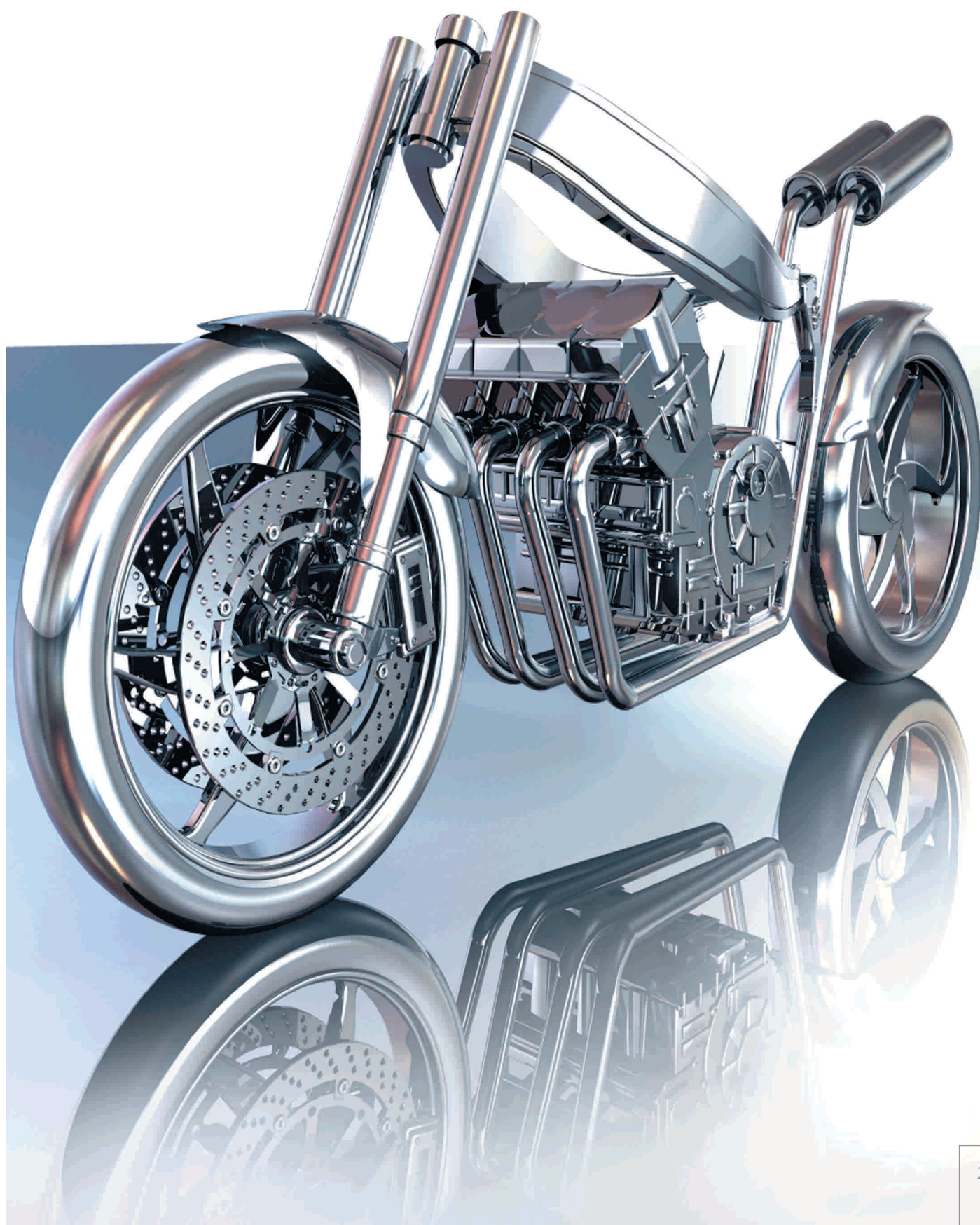
- Decorative anthracite finish
- Suitable for rack and barrel
- Scratch-resistant plating
- High ductility
- Washing chemicals resistant
- Easy application at room temperature

Make-up salt
Blackening additive

DECORATIVE CHROME PLATING PROCESS

- Ambient temperature operation
- Easy control
- Low catalyst consumption
- High covering power
- Low expense on energy and heating
- Low labor cost

Chromium sulphate catalyst
Chromium fluoride catalyst
Chrome defoamer





ECO-FRIENDLY & DECORATIVE PROCESS

Today, laws are created because of environmental concerns, restricted or even prohibited the use of hexavalent chromium and cyanide.

Alternatively, decorative chrome plating with trivalent chromium salts and cyanide free alkaline copper plating technologies were developed.

+3 DECORATIVE CHROME PLATING PROCESS

- High conductive electrolytes,
- High burning limit results high applicable current density,
- Good metal distribution,
- High cathodic current efficiency even at low current densities,
- High plating thickness can be achieved
- White and bright plating process,
- Black and bright plating process,
- Calcium (Russian mud) resistant process,
- Not sensitive to current interruptions,
- High tolerance to metallic impurities and contaminants by ion exchange resin system
- Special anodes to avoid hexavalent chromium formation in the electrolyte.

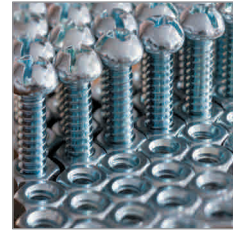
CYANIDE FREE ALKALINE COPPER PROCESS

The chemicals used in conventional alkaline copper plating electrolytes are dangerous and harmful to the environment, such as cyanide.

Therefore, cyanide-free copper processes are developed.

- Environment-friendly,
- Good metal distribution,
- High covering power,
- Ductile layers,
- Cyanide-free
- Applicability for barrel and rack
- Can be applied on all metals





CYANIDE AND ACID ZINC PLATING PROCESS

ACID ZINC PLATING PROCESS

- Very good metal distribution
- Excellent throwing power and well levelling
- Low consumption
- Suitable for ammonium and potassium
- Can work properly at High-and low-zinc content
- Easy to passivate
- Suitable for rack and barrel

Acid zinc brightener

Acid zinc carrier

High-gloss acid zinc brightener

CYANIDE ZINC PLATING PROCESSES

- Very low additive consumption
- High Brightness
- Easy to passivate
- Suitable for rack and barrel

Cyanide zinc brightener

ALKALINE CYANIDE-FREE ZINC PLATING PROCESSES

- High corrosion-resistant layers
- Ductile plating with high adhesion
- Uniform plating thickness
- High-speed plating
- Easy to passivate

Grain refining additive





ENVIRONMENTAL FRIENDLY, FUNCTIONAL ZINC PLATING

CYANIDE-FREE ALKALINE ZINC PLATING PROCESS

Alkaline zinc plating process

Alkaline zinc - iron plating process

Alkaline zinc - cobalt plating process

Alkaline zinc - nickel plating process

INERT CATALYTIC ANODES

- Improved current distribution
- Lower cell voltage
- Low consumption of additives

HYDROGEN CATALYST

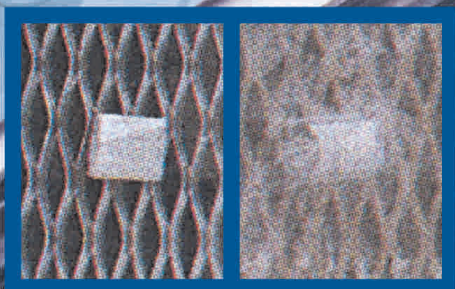
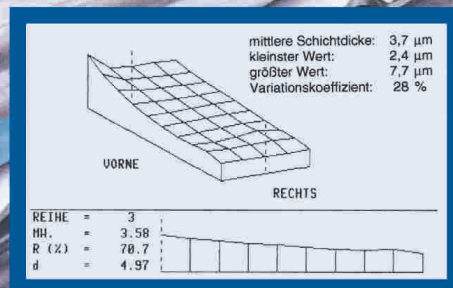
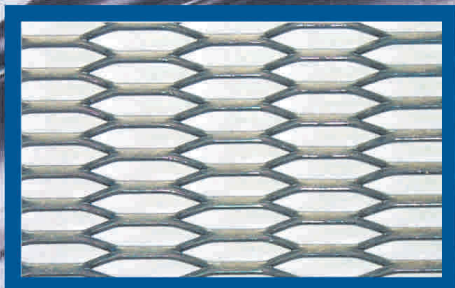
- High dissolution rate of zinc metal
- The smaller volume of zinc generator
- Provides a higher share of zinc

NEW GENERATION ADDITIVES

- Excellent metal distribution
- Homogenous layer
- High burning limit
- Easy to operate

ZINC OPERATOR

- Controls the Bath parameters
- Sets all the dosages of organic additives
- Controls Zinc metal and alkalinity





LACQUERS (TOP COATS) AND PASSIVATIONS ON ZINC AND ZINC ALLOY PLATINGS

CHROME +3 YELLOW PASSIVATIONS

- Hexavalent chromium free
- Very long service life
- High corrosion resistance
- Can be applied on Zinc and its alloys
- World-wide patented

Make-up concentrate
Iron Inhibitor
Resin system for iron contamination
Additive for coloring the passivation layer
Precipitant for zinc contamination

CHROME +3 BLUE PASSIVATIONS

- Hexavalent chromium free
- Very long service life
- High corrosion resistance
- Can be applied on Zinc and its alloys

Make-up concentrate
Iron Inhibitor

CHROME +6 PASSIVATIONS

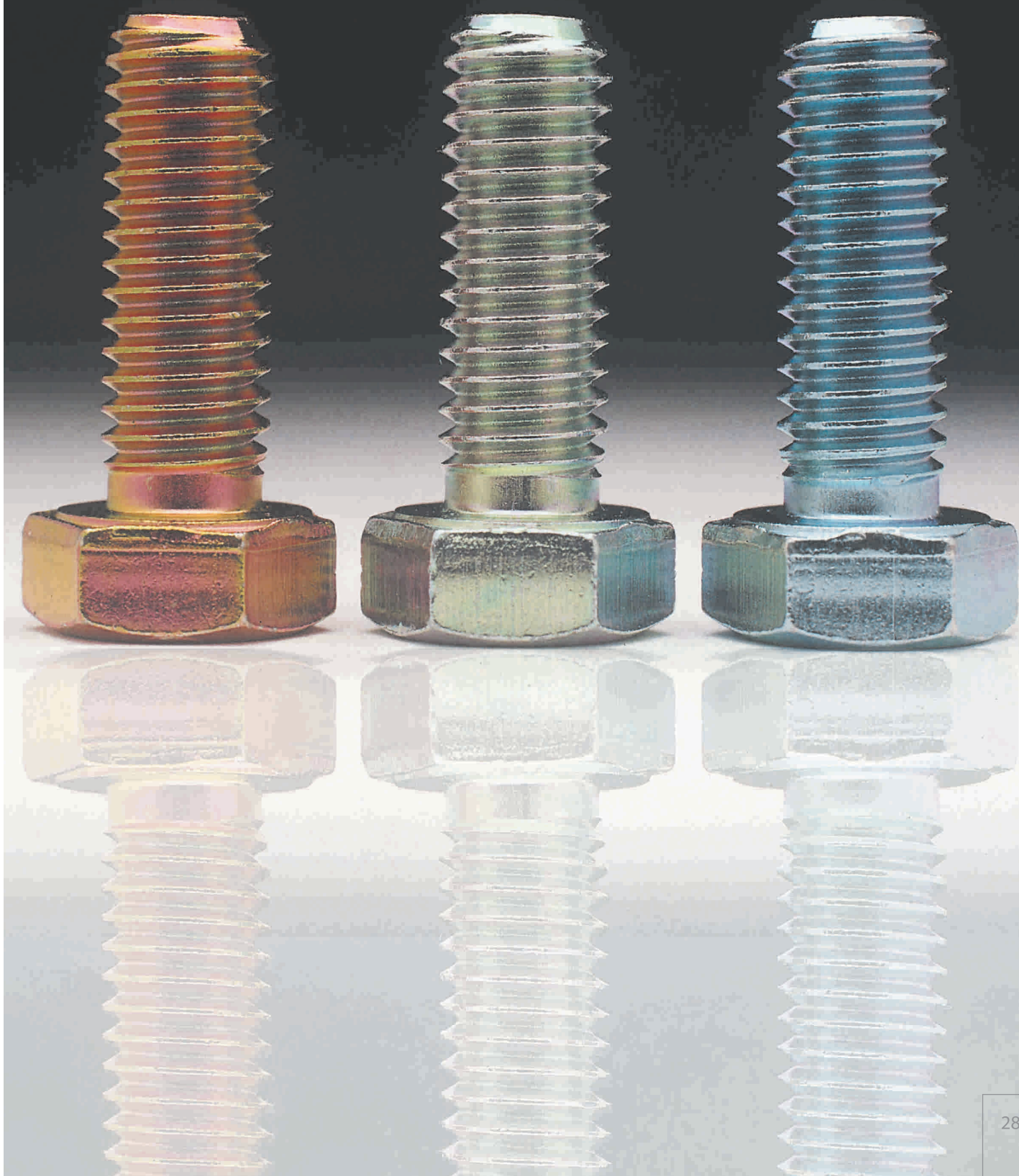
- High corrosion resistance
- Easy to use
- Can be applied on Zinc and its alloys
- Long service life

Blue chromate passivation
Yellow chromate passivation
Olive drap passivation
Black passivation

LACQUERS (TOP COATS)

- Water-based organic lacquers
- Inorganic water-based lacquers
- Water-based organic - inorganic lacquers
- Water-based black lacquers
- Water-based matt lacquers
- Water-based lacquers (waxes) for coefficient of friction

High solid content concentrate



BLACK PASSIVATIONS AND TOP COATS ON ZINC AND ZINC ALLOYS

TRIVALENT BLACK PASSIVATION ON ALKALINE ZINC PROCESS

- Suitable for rack and barrel
- Works at room temperature
- Easy to Apply
- High corrosion resistance even without top coat
- Excellent black and uniform color,

Black passivation make-up
Black color improver additive
With black passivation

TRIVALENT BLACK PASSIVATION ON ALKALINE ZINC - IRON PROCESS

- Suitable for rack and barrel
- Works at room temperature
- Easy to Apply
- High corrosion resistance even without top coat
- Excellent black and uniform color,

Black passivation make-up
Black color improver additive
With black passivation

TRIVALENT BLACK PASSIVATION ON ALKALINE ZINC - NICKEL PROCESS

- Suitable for rack and barrel
- Works at room temperature
- Easy to apply
- Excellent black and uniform color,
- Suitable for %15 - %12 nickel alloy
- High corrosion resistance

Black passivation concentrate

POST DIP FOR BLACK PASSIVATION PROCESS

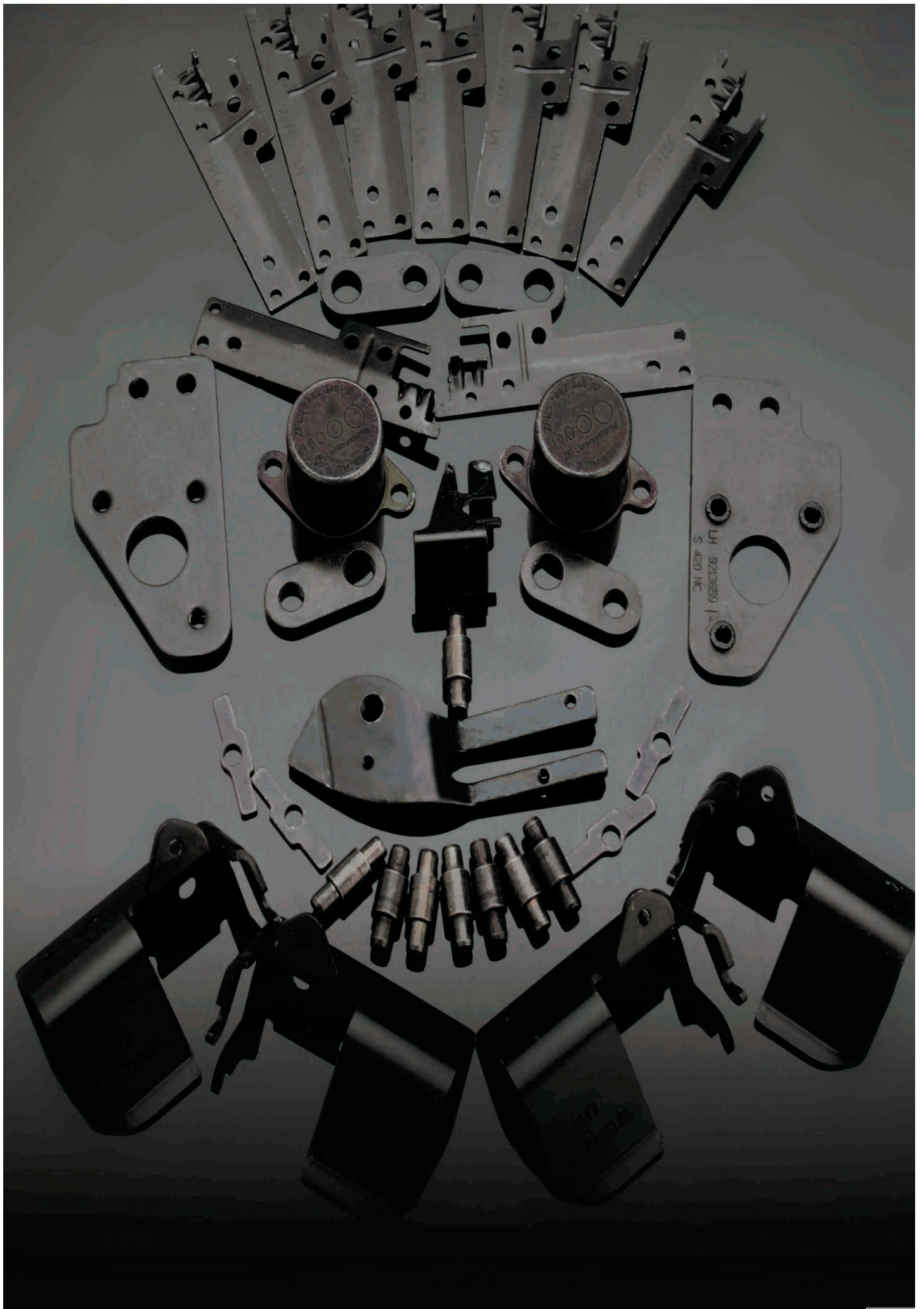
- Hexavalent chromium-free
- Increases the brightness of passivation
- There is no organic content
- Increases corrosion resistance

Make-up concentrate
Additive for homogeneous appearance
Additive for Hardness
Drop-point reduction

ORGANIC BLACK LACQUERS ON BLACK PASSIVATION

- Liquid dispersion
- Suitable for barrel and rack
- Provides high corrosion resistance
- Improves the black looking
- Decreases the coefficient of friction

Make-up concentrate





SILVER PLATING PROCESS

- High gloss finish
- Very white plating
- Low contact resistance
- Homogeneous appearance

Suitable for rack and barrel
Economic process
Matte silver-plating
Thick silver-plating

PROCESS

- Silver plating brightener
- Silver plating carrier
- Silver plating corrector