

INSIDER



NEWS

The PSS team attended the training program held at JCU Corporation, Japan

PSS is proud to announce the Approval from JCU Japan to manufacture POP plating on plastic Chemicals in PSSPL plant. Our sincerely thanks to Mr Kimura , Mr Inoue , Mr Araake , and Mr Arata , Mr Fukushima.



Training at JCU, Nigata



OUR ACHIEVEMENTS

We are excited to showcase our comprehensive surface finishing solutions at,

International Exhibition on Fastener & Fixing Technology
26-27-28 July 2024, Pragati Maidan,
New Delhi STALL NO : G36A, 12 sqms.

We will be introducing following products under the brand name **Zinkage** (Zinc, Zinc alloy, Passivations, Sealents, and Top coats) Additionally, we will also display our unique Zinc Flake system (**LAFRE**) and room temperature repair Zinc Flake Paint (**DRALL**).



ISF Delhi 2018



E-COATING-LECTRAFIN

Process established for a well known 5 spectacle Company

DV1096E DARK GUNMETAL is an electrophoretic process for creating a high gloss 'dark gunmetal' color effect on metal spectacle frames, based on the ZETACLAD 5000 Base resin system and ISO12870:2016 requirements.

DV1096E LIGHT GUNMETAL is an electrophoretic process for high gloss, light gunmetal color effects on metal spectacle frames, enhancing hardness, the scratch resistance, and meeting ISO12870:2016 standards.

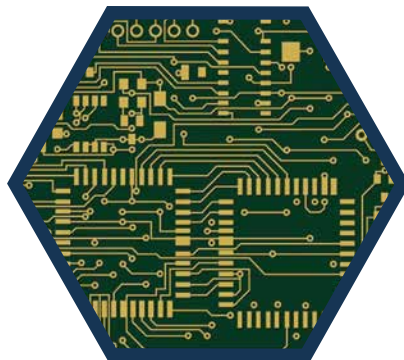
ULTEC 3001 DV1102 is a low-temperature electrophoretic coating process that creates a Rose Gold effect using ULTEC resin system and 'NOVAR' colorants.



"The best way to predict the future is to create it."

NEW LAUNCH

For PCB Application
Auridior
GOLD PLATING PROCESS



AURICID IM ELECTROLESS GOLD PLATING

AURICID IM is an immersion gold bath which deposits uniform gold layers in the range between 0.05 – 0.1 μm thickness which is typical for PCB applications. The layers have good adhesive strength on nickel.

The gold bath is particularly suitable for immersion gold plating of electroless nickel plated printed circuit boards. The deposits have a standard of 99.9% Au. The thin gold layers protect the nickel layer of oxidation and ensure a good solderability and bondability of the nickel layer.

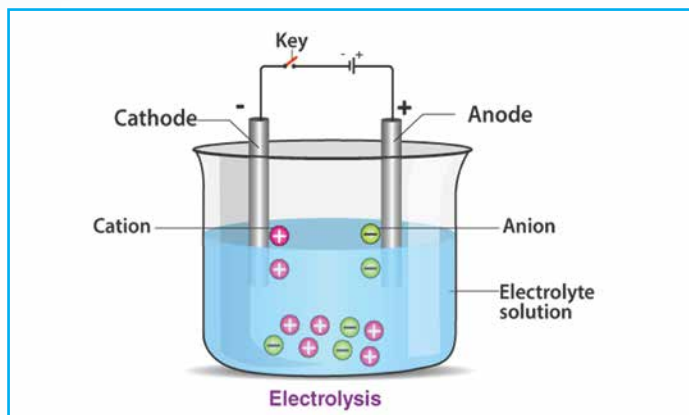
BLACK IS THE NEW
GOLD

INTRODUCING
**BLACK OXIDE FINISH FOR
 MILD STEEL AT ROOM
 TEMPERATURE**
COLD BLACK OXIDE



A Room Temperature Black Oxide Finish for mild Steel By Immersion dipping good Corrosion Protection and aesthetic Matt black Silky finish.

"Leadership is the capacity to translate vision into reality."



SERIES 2

BASICS OF ELECTROPLATING

In Continuation From Last Issue 1

(11) WHAT IS A PLATING SOLUTION ?

A plating solution is a conducting medium in which the flow of a direct current is accompanied by the transfer of metal ions. It is usually composed of metal salts dissolved in water along with other chemicals.

(12) WHAT ARE THE PRINCIPAL TYPES OF PLATING SOLUTIONS ?

The principal types of plating solutions are strongly acid, weakly acid, and alkaline plating solutions.

(13) WHAT ARE STRONGLY ACID PLATING SOLUTIONS ?

Strongly acid plating solutions are those having a pH below 2 and usually consisting of a metal salt plus acid. Examples of strongly acid solutions are the acid copper sulfate solution and the chromium plating solutions.

(14) WHAT ARE WEAKLY ACID PLATING SOLUTIONS ?

Weakly acid plating solutions are those having a pH between 2 and 7. Examples of weakly acid solutions are nickel plating solutions (pH 2 to 5.5) and acid zinc solutions

(15) WHAT ARE ALKALINE PLATING SOLUTIONS ?

Alkaline plating solutions are those having a pH above 7. They frequently contain cyanide solutions of copper, zinc, cadmium, silver, or gold. Other alkaline plating solutions may contain pyrophosphates of copper or zinc or else stannates commonly used for tin plating

(16) WHAT IS THE PH OF A PLATING SOLUTION ?

The pH of a plating solution is a measure of its acidity. The acidity arises from hydrogen ions produced by the dissociation of water or acids in the solution. By definition, the pH is the negative logarithm of the hydrogen ion concentration in gram equivalents per Liter. It is approximately equal to the number of places after the decimal point in the hydrogen ion (H) concentration. For example, a nickel plating solution has a (H) concentration of 0.01 g. eq. per Liter would have a pH of 2. Pure water, which contains only 0.0000001 g.-eq.(H) per Liter, has a pH of 7. Thus, the fewer the number of hydrogen ions in a solution the higher its pH.

(17) WHY ARE SOLUTIONS CALLED ALKALINE ABOVE PH 7 and ACID BELOW PH 7 ?

Solutions with a pH above 7 are called "alkaline" because there is an excess of alkali-producing hydroxyl ions (OH) remaining after all the acid-producing hydrogen ions (H)* have been neutralized. At exactly pH 7 the solution is called "neutral" because the (H) and (OH) ions have the same concentration, namely, 0.0000001 g.-eq. per liter. Below pH 7 the solution is called "acid" because there is an excess of (H) over (OH) ions and the excess (H)+ ions produce acidity.

(18) HOW IS THE pH OF A PLATING SOLUTION MEASURED ?

The pH of a plating solution may be measured electrochemically by a pH meter or colorimetrically by chemical indicators. Most pH meters measure the electromotive force between a saturated calomel electrode and a glass electrode in the plating solution and then convert it to a pH reading. Chemical indicators added to the plating solution, or present in test papers dipped into the solution, will change color depending upon the pH. Then they are compared with standard "buffer" solutions of known pH.

BADHAI HO !!

We are Celebrating the birthdays of

1st Jun - Shankar Shinde , Mumbai kolkata .

5th Jun - Pankaj Varma , Kanpur .

7th Jun - Muthuraj M , Coimbatore .

11th Jun - Khurshid Pathan , Pune .

15th Jun - Yuvaraj A , Selam .

20th Jun- Rais Khan , Ludhiana .

26th Jun - Soumya Das , Faridabad .



"The function of leadership is to produce more leaders, not more followers."

MD'S

CORNER



LAUNCHING SILVER ANTITARNISH

Antitar

B-250

Anti-Tarnish B-250 is a nanotechnology-based silver aqueous immersion working tarnish eprotection, forming a thin nanometre-measuring layer by binding polymers on the surface.

B-250 PLUS

PROBRITE B-250 plus increases strength Applying the passivation layer electrolytically produces a clear,organic protective surface with a few nanometer of thickness.This layer does not significantly alter the silver's gold electrical characteristics such as conductivity and contact resistance.

B250 :

	5min	10min	15min	20min
pH Value 3,3	Result	Result	Result	Result
Concentration 10 mL / L	Comment	Comment	Comment	Comment
	Coating time 10 sec	Coating time 10 sec	Coating time 10 sec	Coating time 10 sec
Temperature 60° C	Test Piece	Test Piece	Test Piece	Test Piece

Process Electric Coating time 5 min

Startup Test - Immersion test , the test piece is dipped in potassium polysulphide lsg (2%) and removed after an appropriate period of time.

B250 Plus:

	5min	10min	15min	20min
pH Value 3,3	Result	Result	Result	Result
Concentration 10 mL / L	Comment	Comment	Comment	Comment
	Coating time 10 sec	Coating time 10 sec	Coating time 10 sec	Coating time 10 sec
Temperature 60° C	Test Piece	Test Piece	Test Piece	Test Piece

Process Iridium Mixed Metal electrode Coating time 10 sec at 5.0 V

Startup Test - Immersion test , the test piece is immersed in ammonium sulphide lsg (2%) and removed after an appropriate time.

PRODUCTION FACILITY

More than 50 years experience in manufacturing electroplating chemicals

- Approval from JCU Japan to manufacture JCU Electro-plating Chemicals in PSSPL plant in Vasai India
- Having all required facilities Plant & Machinery and Laboratory for manufacturing such chemicals,
- Well experienced senior manpower in production and quality control (managers and workmen)

The PSS plant, certified for chemicals manufacturing, holds all necessary licenses and permissions, including those from State Pollution Control, Hazardous Waste Disposal, Solvent Usage, and Poisonous Chemical Usage. Located in an authorized industrial zone, the plant operates with full industrial permissions and complete power backup. The manufacturing facilities span 50,000 sq ft.

Being in long years in business, assets have low book value for competitive cost of production. Machineries are gradually replaced by new ones from time to time in phases,

- Over Heads and Manpower costs is well distributed overrange of products groups which are manufactured by PSSPL, Hence, total Over Head Cost does not fall on POP Chemicals alone .



GLR REACTORS



RIBBON MIXER



SS REACTORS

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"A leader is one who knows the way, goes the way, and shows the way."