

# INSIDER

ISSUE 08

For Internal Circulation Only

PSSPL Wishes you  
**HAPPY NEW YEAR**

## PSSPL News

VISIT US AT MACHAUTO EXPO SHOW



**WE ARE PARTICIPATING**  
**MACHAUTO EXPO SHOW**

LUDHIANA EXHIBITION 21TH TO 24TH FEBRUARY 2025.

VENUE :-  
Ludhiana Exhibition Center Gt Road, Sahnewal, Ludhiana

To Answer All Of Your Questions, Plan To Stop By Or  
To Schedule An Appointment.  
Email [Sourcing@progressivesurfacesystems.com](mailto:Sourcing@progressivesurfacesystems.com)

**VISIT US**

The 14th Edition of Mach Auto Expo 2025, an exclusive and most trustworthy Premier Exhibition about Machine Tools and Automation Technology is being organized by 'Udan Media and Communications Pvt. Ltd.'

## Product Focus : E-COAT

### CLEARCLAD LCBH



CLEARCLAD LCBH is a cathodically depositable, clear glossy lacquer process designed for general metal finishing, for example light duty builder hardware applications. It develops a robust, chemically resistant, protective coating for a wide range of base metals and electroplated surfaces.

## Follow Us On Social Media



## Active Involvement

### Revolutionize Your Surface Activation & Cubic Printing with PSSPL's SURACT Range

Make your work easier and more efficient with PSSPL's innovative SURACT range. SURACT Z-11 effectively cleans and prepares tricky metal surfaces.

SURACT DAS-10 ensures perfect coating adhesion.

SURACT CP-4 simplifies 3D object printing with neat and precise results. Designed for excellence, Transform your operations today with PSSPL's SURACT Z-11, DAS-10, and CP-4!

Follow us on the below accounts

Twitter handle:

**psspl\_surface**

LinkedIn account:

**Progressive Surface Systems Pvt Ltd**

**NEW  
ARRIVAL**

# NEW LAUNCH

*Chetak*



## SOFT NICKEL SULFAMATE NICKEL

**NICTEC -11**

SULFAMATE NICKEL PROCESS FINE-GRAINED,  
DUCTILE AND STRESS FREE

- Electroplate is fine-grained, ductile, and stress-free.
- Ideal for complex shapes.
- Useful for electronic components, printed circuits, terminals, Connections, hardware, jet engine overhaul, aircraft parts, rollers, molds, and dies.

## BRN

BRIGHT NICKEL PLATING SUITED FOR THE NEW  
MICROPOROUS CHROME PLATING SYSTEM.

- Has excellent mirror brightness and levelling effect.
- The process is suited for undercoating of electronic parts and noble metal plating.
- The film is very ductile and best suited for plating on plastics.
- Best suited for multilayer nickel plating.

## SN-NI-CO ALLOY

**ANTHRACITE**

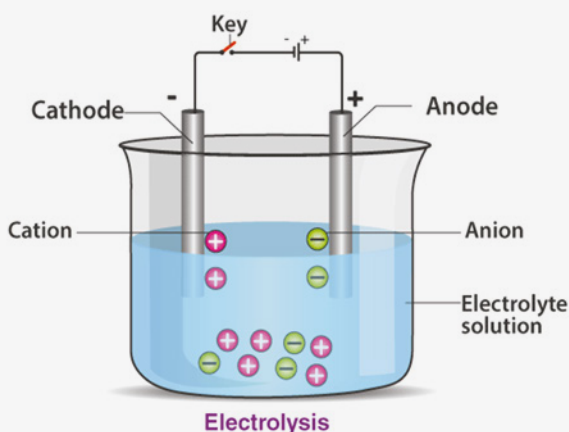
THICK SN AND NI ALLOY COATING

- The electrolyte is a means of depositing & maintaining brightness, corrosion resistant, anthracite, colored deposits.
- Anthracite - mud electrolyte will give the deposit in dark shade while anthracite - mul will give a lighter
- This alloy deposits 65% Tin & 35% Nickel.

## IND E CR - 601/602

BRIGHT CROME PLATING PROCESS

- The IND E CR 601 process is a decorative chrome plating process containing a special catalyze.
- A bright surface can be obtained over a wide current density, and the throwing power is excellent.
- The IND E CR 602 is a mist suppressor for chromium plating.



## SERIES 3

# BASICS OF ELECTROPLATING

In Continuation From Last Issue

### 34. WHY ARE INSOLUBLE ANODES USED IN ELECTROPLATING?

Insoluble anodes are used in electroplating to maintain a uniform anode to cathode spacing when plating inside recessed or enclosed areas. They are also used to prevent excessive metal buildup in baths employing chemically reactive soluble anodes. For example, in alkaline baths such as cyanide cadmium the anode efficiency normally exceeds the cathode plating efficiency and ordinary chemical corrosion of soluble anodes during non-plating intervals also tends to increase the metal concentration in the solution. By using insoluble case-hardened steel anodes the cadmium metal buildup may be controlled. In precious metal plating, such as gold plating, insoluble stainless steel anodes reduce the amount of money invested in inventory and also reduce the chances of loss through theft.

### 35. WHAT ARE THE DISADVANTAGES OF INSOLUBLE ANODES IN ELECTROPLATING?

Insoluble anodes will generate strong oxygen evolution as well as chlorine in a chloride-bearing electrolyte. The resulting spray presents a corrosion problem to plant equipment and the evolved gases must be vented thoroughly, since insoluble anodes tend to oxidize certain bath constituents they are not useful in baths containing organic addition agents or cyanides. Finally, the metal content of baths using insoluble anodes must be maintained by the continuous addition of metal salts unless the bath is operated in conjunction with some soluble anodes.

### 36. WHY IS IT IMPORTANT TO REGULATE THE SOLUBLE ANODE CURRENT DENSITY?

The anode current density must be regulated so that the anode dissolves at the proper rate. If the current density is too high the anode may become passive and stop dissolving. It then behaves as an insoluble anode, evolves oxygen, depletes the metal content of the bath, and requires the addition of metal salts. To reduce the anode current density more anodes may be put in the bath, corrugated sheet anodes may be used, or the tank voltage may be reduced until the desired anode current density is reached. In the case of alkaline tin plating the anodes are intentionally "polarized" at high current density to form a film which insures the dissolution of tetravalent tin (stannate) instead of the bivalent form (stannite) which causes poor deposits.

## INDUSTRIAL NEWS

### Increasing tax on EVs will make it difficult for electrification journey: Kia India MD & CEO

The company, which unveiled its new SUV, Syros, is looking at around 17 percent sales growth next year at 3 lakh units, as compared to 2.55 lakh units expected this year.

### Maruti Suzuki is first car manufacturer in India to make 2 million units in a year

An Ertiga made at its Manesar factory in Haryana is the 2 millionth vehicle to roll out from Maruti Suzuki's stables.

### Bajaj Auto launches new Chetak 35 Series electric scooters. Check price, other details

Bajaj Chetak: The '35 Series,' gets its nomenclature from the powerful 3.5 kWh battery capacity. Chetak 3501, 3502, and 3503—are ergonomically designed for ease of riding, larger boot space, and shorter charge times, according to the company.

### Ola Electric expands network to 4,000 stores nationwide

The expansion spans beyond metros and Tier I and II cities into smaller towns and tehsils. The network stores will also act as service centres.

### Tata Punch leads PV sales chart in 2024, followed by Hyundai Creta and Maruti Ertiga

According to Ravi Bhatia from Jato Dynamics India, Maruti Suzuki Ertiga, Hyundai Creta, and Tata Punch dominate their respective segments by serving distinct buyer groups with specific needs.

## Badhai Ho! PSSPL BIRTHDAY BULLETIN

- 1<sup>st</sup> December - Manish Singh
- 13<sup>th</sup> December - Tika Prashad Nainwal
- 20<sup>th</sup> December - Sandeep Kumar
- 27<sup>th</sup> December - Ketan Narendranath Bhatt



MDs

CORNER



PROCESS SEQUENCES FOR CHETAK

Cleaning

Bright Chrome Plating process  
[IND E CR - 601/602]

Cyanide Copper Process  
[Cupracyn]

Anthracite Nickel Process  
[Anthracite]

Sulfamate Nickel process  
[Nitec 11]

Bright Nickel Process  
[BRN]

Chetak

"PSSPL's Vasai Factory Gets a Fresh New Look!"

We are excited to share that our Vasai Factory has been freshly painted, giving the facility a modern, clean, and revitalized appearance. This upgrade reflects PSSPL's commitment to maintaining world-class infrastructure and providing a productive, well-maintained environment for our operations.

HEADOFFICE - 10,000 square feet

FACTORY :- 50,000 square feet

