

INSIDER

Issue 03

For Internal Circulation Only



PSSPL News

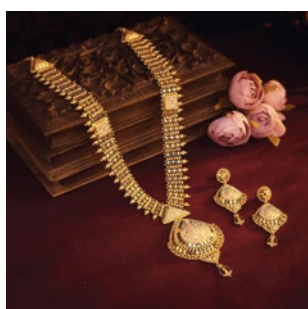
Ms. Palak Shah, Director- Business Development, and Ms. Riya Shah, Director of Business Administration & Finance, had visited M/s. (LVH Coating Ltd , UK) our long-standing partners and collaborators Since 1992. During the visit, LVH shared the latest technologies that are being developed at LVH. UVLEDCLAD E-coat, for example, was the key focus. Many other electrophoretic

technologies were being introduced to PSSPL through intensive training program planned by the technical director of LVH Mr. Peter Hope. Plus many live tests & experiments, related to the physical and chemical performance for many E-coat processes were carried out . PSSPL has taken up to promote these new Ecoat processes for the Indian and Indian subcontinent markets.

Product Focus : E-COATING

PERFUME RESISTANT ELECTROLACQUERING SYSTEM FOR IMITATION JEWELLERY APPLICATION .

Shimaclad Peony was developed solely to overcome the poor performance of dye gold electrophoretic process for expensive imitation jewellery.It provides high resistance to perfume and perspiration and makes it suitable for applications like (Chains, Mangalsutra, Bangles, and Stone Studded jewellery) .This process increases the life and enables repeated wearability.This process has Ultra Low-Temperature Cure capability.



Kerela Gem and Jewellery Show



Active Involvement

PSSPL participated in this expo . Our team had very fruitful interactions with our existing and potential new prospects. We also showcased various processes such as Electrophoretic lacquer (Uviclad 612 & Shimaclad Peony),(Rhodium saving process (Palladior Zinc alloy), Flash Palladium process, 24Kt flash gold , HeavyGold and Silver Plating process at the booth.) The event which was held for three days saw a footfall of more than 500 visitors. We received anoverwhelming response and a high visibility of progressive processes were evident during the event.



NEW LAUNCH

PROXAL™

ALLOY PLATING PROCESS



TINCOLLOY-NICEONE

Thick Sn And Ni Alloy Coating (SN-NI-ALLOY)

This coating forms a bright white layer that offers exceptional corrosion resistance. It preserves the substrate's brightness, even with a thick application exceeding 10 µm. The alloy is nonmagnetic and finds application in replacing chromium in decorative and light engineering industries and in printed circuit boards, as an etch resist. This process also offers an alternative to electroplated chromium for both decorative and protective applications, including hardware and electrical accessories, aerospace.

NIPHOLLOY

Hard Nickel Phosphorus Plating Process

NIPHOLLOY is an advanced, cost-effective Ni-P (phosphorus) electroplating method. It requires minimal replenishment and offers high current efficiency, uniform plating, and short plating times without an auxiliary anode, greatly enhancing production efficiency. It is applicable for protecting flight-critical components on aircraft. Automobile manufacturers also use it for coating pistons, gears, cylinders, and various moving parts.



DECORATIVE NONCYANIDE NICKEL FREE PROCESS

Avoids Skin Allergies Caused By Nickel

TINCOLLOY-SPECULAR

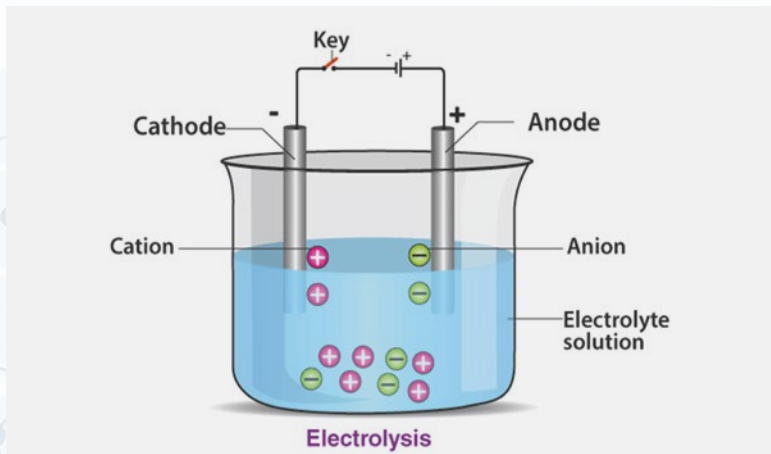
It produces a white, shiny coating, with longer application times resulting in a thicker layer. The coating offers excellent corrosion and chemical resistance, making it suitable for both rack and barrel applications. This solution combines aesthetic appeal with high durability, ensuring a safe and effective finish for various uses without causing allergic reactions.

TINCOLLOY-CHERRY GOLD

It provides a floral appearance with a slightly pink, golden hue. The coating is free from allergic substances like nickel, and it does not contain cyanide or other toxic materials. It is easy to manage and stable, making it ideal for barrel plating applications. This solution offers a safe, attractive, and durable finish, suitable for various decorative uses while ensuring user safety and environmental friendliness.

TINCOLLOY-CT BLACK

It produces elegant black finishes and it has excellent abrasion and discoloration resistance. It is suitable for both barrel and rack plating, producing a fine black, evenly finished layer. It meets EU market standards by preventing Ni allergies, is non-magnetic, and free of toxic cyanide.



SERIES 3 BASICS OF ELECTROPLATING

In Continuation From Last Issue

(19) WHAT DETERMINES THE CHOICE OF PLATING SOLUTION TO BE USED?

The choice of plating solution to be used depends upon the Job to be performed by the resulting deposit. For example, a thin deposit of cyanide copper is required over steel to prevent the formation of a poorly adherent immersion coating in an acid copper bath. Also, nickel deposits are required as an undercoating in gold and rhodium plating for the same reason. For corrosion resistance, deposits of cadmium, zinc or nickel may be chosen and for wear resistance chromium deposits are selected. Thus, a single plating solution or a combination of several of them may be required to perform a given job.

(20) HOW ARE PLATING SOLUTIONS PREPARED?

a) The required amount of plating chemicals is dissolved in water in a spare tank (not a plating tank).

b) Impurities in the solution are removed by various chemical procedures followed by treatment with activated carbon.

c) Suspended solids are then removed by filtering the solution into a clean plating tank.

d) Final adjustments of the solution are made, such as pH, temperature, surface tension, and brightener concentration; and finally.

e) Remaining impurities are removed by low current density electrolysis ("dumming") until the solution is in proper operating condition.

(21) HOW ARE METAL SALTS PRODUCED FOR USE IN PLATING SOLUTIONS?

Metal Salts are usually produced for use in plating solutions by dissolving pure metals chemically or electrochemically in an aqueous medium and then crystallizing out the salts formed. For example, nickel may be dissolved in sulfuric acid to form nickel sulfate and zinc may be dissolved in sodium cyanide to produce zinc cyanide.

INDUSTRIAL NEWS

AUTOMOTIVE PRODUCTION TRENDS IN INDIA						
Category	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Passenger Vehicles	40,28,471	3,424,564	30,62,280	36,50,698	45,87,116	49,01,844
Commercial Vehicles	11,12,405	7,56,725	6,24,939	8,05,527	10,35,626	10,66,429
Three Wheelers	12,68,833	1,132,982	6,14,613	7,58,669	8,55,696	9,92,936
Two Wheelers	2,44,99,777	2,10,32,927	18,349,941	1,78,21,111	1,94,59,009	2,14,68,527
Quadricycles	5,388	6,095	3,836	4,061	2,897	5,006
Grand Total	3,09,14,874	2,63,53,293	2,26,55,609	2,30,40,066	2,59,40,344	2,84,34,742

- From 2018 to 2024, the automotive industry experienced notable fluctuations across various vehicle categories.
- Passenger vehicle sales rose from 4,028,471 units in 2018-19 to 4,901,844 units in 2023-24.
- Commercial vehicles saw a recovery post-2019-20, increasing to 1,066,429 units in 2023-24.
- Three-wheelers and two-wheelers also showed growth, with two-wheelers reaching 21,468,527 units by 2023-24.
- Quadricycles remained the least sold category, peaking at 6,095 units in 2019-20.
- The overall market, despite a dip in 2019-20 and 2020-21, rebounded to 28,434,742 units in 2023-24, reflecting resilience and recovery in the sector.

Badhai Ho! PSSPL BIRTHDAY BULLETIN

5th July - Muntha Hema Nagendra Kumar

7st July - Ashish Raghav

7th July - Devendra Singh

11th July - B Gowri Shankar

31th July - Irfan Khan



MDs CORNER

ZINC SHIELD



LAUNCHING ZINC TRIVALENT PASSIVATION

ZPN BLUE 2 (Cobalt free passivation)

It is utilized for providing a thick layer of zinc passivation. The passivated coatings can be coloured. The passivation produces blue, yellow, green, and red coloured coating. These coatings remain stable at temperatures up to 200°C and effectively resist hydrogen embrittlement, ensuring durability and reliability. By eliminating cobalt, they offer a safer, environmentally friendly solution without compromising on performance.



PROGRESSIVE'S WAREHOUSE FACILITY

FINISHED GOOD

Our state-of-the-art storage facility ensures products are kept in optimal conditions, maintaining quality and extending shelf life. With advanced inventory management systems, we track stock levels in real-time, reducing overstocking and stockouts. Our secure, flexible facilities accommodate various product types. We use the First-In, First-Out (FIFO) principle to ship



RAW MATERIAL

Our Raw Material Storage Facility enhances operational efficiency and production capacity. Advanced temperature and humidity control systems maintain optimal conditions for our raw materials, preserving their integrity. Increased storage capabilities improve inventory management, reduce waste, and support sustainability, marking a pivotal step in our journey

