

# **ENP TECHNO ENGINEERS**

Your Partner In Product Improvement

www.metalsurfacetreatment.in

### Located At...



### Ahmedabad, India

**Nearest Airport : Ahmedabad** 

**Railway Station : Ahmedabad** 

# Port connectivity: Kandla, Kutch & Navaseva, Mumbai

## **Company Profile...**

- ENP TECHNO ENGINEERS is a leading industrial coating applicator with over 30 years of experience and is known throughout the industry for excellent quality, prompt service and innovation. Put our problem solving technical expertise to work for you. We will provide the best solution for your coating needs. ENP TECHNO ENGINEERS serves an endless list of customers. With a modern production facility, constant technical innovation, unmatched customer service, expert staff and competitive price, we can assure our customers that they will always get the best solutions for their needs.
- Plant is spread over 24000 Sq. feet area.
- The facility is equipped to quality job work of Electroless Nickel Plating, Zinc Flake Coating and Cathodic Electro Deposition
- The quality management system is certified to ISO 9001: 2008.

### **Company Profile...**

#### Vision

 Growth of Company, Employees and Associates by adopting advanced technology, positive attitude, teamwork & innovative approach.

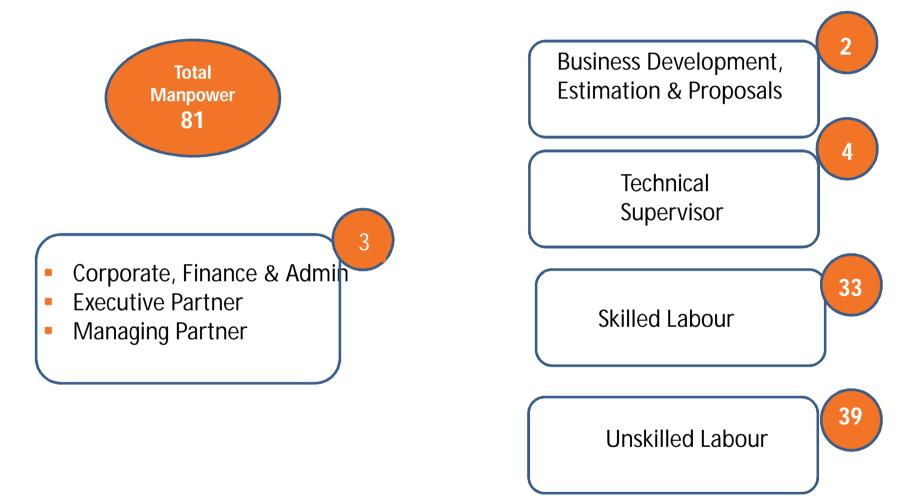
#### Mission

 To become a frontrunner company in metal surface finishing business by providing world class quality Plating, coating and services to our customers and maintain highest level of customer satisfaction.

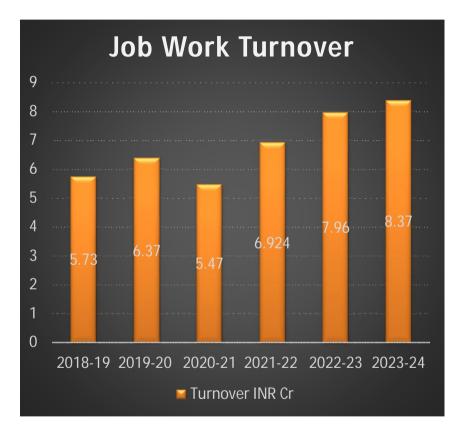
#### Our Philosophy

- Excellence is our way of life. It is not an attribute or end result, it is the attitude with which all our business processes are created and sustained.
- We nurture individuals of highest integrity, professionalism and self esteem and provide an ambience where they are able to realize their fullest potential.
- The touchstones of all our transactions with our employees, suppliers and service providers shall be fairness, equitability, transparency and consistency.
- We are committed to safeguard the safety and health of our employees and men working under our supervision.
- We remain steadfast in our commitment to protect the environment and shall not leave a bigger foot print than what is absolutely essential in sustaining our business.

### **Manpower Resources...**



## Financials...



• ENP TECHNO ENGRS is expected to achieve Sale of INR 9 Crore in the current financial year.

## Major Customers...

INDIAN SPACE RESEARCH ORGANISATION

- FLOW CHEM INDUSTRIES
- STEEL STRONG VALVES
- GM VALVES
- ERHARDT LEIMER INDIA PVT LTD
  INSPIRON ENGINEERING PVT LTD
- SINTEX INDUSTRIES
- PRESSURE JET PVT LTD
- MAMTA EXTRUSION PVT LTD
- LINE O MATIC GRAPHIC INDUSTRIES
- PRASHANT GROUP OF INDUSTRIES
- PARLE ELIZABETH TOOLS PVT LTD
- HELIOS CONCREW PVT LTD
- NANA UDYOG (SURAT)
- ATE ENTERPRISES PVT LTD.
- FINE THREAD FORM INDUSTRIES
- CIPET (VATVA)
- SHYAM PLASTIC INDUSTRIES
- VIHAN ENGINEERING PVT LTD
- HIRO NISHA SYSTEMS PVT LTD
- RAJHANS PLASTIC MACHINERY PVT LTD
- DUTRON PLASTICS LTD



#### **Oil & Gas Sector**



#### **Engineering & Textile Sector**



#### **Plastic Sector**



ENP Techno Engineers is a leading industrial coatings applicator with over 27 years of experience and is known throughout the industry for excellent quality, prompt service and innovation. The importance of selecting a right coating or surface modification is a major factor for improving performance of your job/equipment. Recently we have started a new coating process - CATHODIC ELECTRO DEPOSITION - CED - Coating which is the most modern technique for deposition of paint on metal parts by environment friendly process. CED is black colored water based epoxy paint for very good corrosion resistance coating and pleasant appearance.

### **CED COATING**

#### **Advantages**

- Submersible Pump Castings
- Applies a uniform coating thickness on entire part.
- (2) Complex fabricated parts can be coated all over.
- (3) High speed production. Fast process cycle.
- (4) Possible on conductive metals.
- (5) Fully automatic process. Minimum human labor involved.
- (6) Uniform jet black colour.
- (7) Can be done on welded assembly.
- (8) Thickness is controlled from 15-25 microns.
- (9) Salt spray test pass more than 900 hrs. against 50-60 hrs of Zinc plating.
- (10) This coating is 10 times better than Phosphating and Zinc plating, offers upto 5 years life.
- (11) Can be used as a final coat or as a primer to do top coat.

Industrial Machinery Part Small Parts Production Detail of racking density





Automobile Component Suspension / Ride Control

Unique ability to coat complete assembly without damage to dampening rod or rubber seals



YOUR PARTNER IN PRODUCT IMPROVEMENT



**INDUSTRIAL COATINGS** 



ENP TECHNO ENGINEERS

### **CED COATING**

#### Applications:

- (1) Automobile parts, Agriculture parts
- (2) Pump & Motor parts like Castings & Motor Covers etc.
- (3) Textile Machinery parts
- (4) Sheetmetal & Casting Machinery Parts
- (5) Furniture & Lamp Masts
- (6) Internal Coatings in Pipes

#### Industrial Machinery Part Heavy Structure

Ability of coating Weldments. Weld coverage detail.

#### SUMMARY BENEFITS

- (1) "Green Process" Environment friendly
- (2) Gives a durable, corrosion resistant, high quality coating
- (3) Coats full assemblies and tube I.D. greater protection with less complex process
- (4) Consistent coating uniformity and edge protection
- (5) Eliminates production coating limitations for part size, shape or complexity
- (6) Reduces in-process manufacturing time, inventory and total production cost

#### **OTHER COATINGS WE OFFER**

Electroless Nickle Plating Superior Hard Anodizing Xylan<sup>®</sup> Coating For Fasteners Heat Resistance Coating Alkaline Zinc Plating Titanium Anodizing Hard Chrome Plating Glass Blasting

Autophoretic<sup>®</sup> (Superior Black Coating) Magni<sup>®</sup> - Zinc Flake Coating for Fasteners PTFE, FBE, Nylon, HALAR, KYNAR, ETFE & ECTFE Coating Protective Polymer Coating



#### ENP TECHNO ENGINEERS

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INDUSTRIAL COATINGS







## **CATHODIC ELECTRO DEPOSITION (CED)**



### **PLC CONTROLED PLANT**

## **CATHODIC ELECTRO DEPOSITION (CED)**



**TYPICAL JIGGING** 

# **ZINC FLAKE COATING**

**Zinc flake coatings** are non-electrolytically applied coatings, which provide good protection against corrosion. These coatings consist of a mixture of zinc and aluminum flakes, which are bonded together by an inorganic matrix.

The specifications for zinc flake coatings are defined in international standard ISO 10683 and also in European standard DIN EN 13858. DIN EN ISO 10683 sets out the requirements for zinc flake coatings for threaded fasteners and DIN EN 13858 describes the requirements for zinc flake coatings for fasteners with no thread and for other parts as well

- Good appearance (colouring)
- Very good protection against corrosion (240 1,500 hours, depending on specification and coating thickness)
- Resistant to extreme temperatures
- Good chemical resistance
- Environmentally friendly
- Good friction characteristics (on bolts and nuts)
- No warm-loosening torque
- No risk for high-strength fasteners of any hydrogen embrittlement
- Electric conductivity

OFFICIAL LICENSEE APPLICATOR OF MAGNI INC – USA. <u>www.magnicoatings.com</u>

### **APPLICATIONS**



**ONSHORE & OFFSHORE** 



HOSE CLAMPS



ZINC FLAKE COATED COMPONENTS

## **ZINC FLAKE COATING**



10" DIP SPIN MACHINE



**BLASTING MACHINE** 



#### 12" DIP SPIN MACHINE



ZINC FLAKE COATED SCREWS

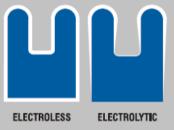
## **ELECTROLESS NICKEL PLATING**

Electroless nickel plating is an auto-catalytic reaction used to deposit a coating of nickel on a substrate. Unlike electroplating, it is not necessary to pass an electric current through the solution to form a deposit. This plating technique is to prevent corrosion and wear. The electroless process has several advantages over electroplating:

- virtually unlimited throwing power
- Ittle or no excess deposit at high points
- deposits of excellent physical and chemical properties
- reduced hydrogen charging (hydrogen embrittlement)
- ability to coat surfaces which would be difficult or impossible by electroplating
- •The principal disadvantage of the electroless process is high cost.

It is actually a nickel-phosphorus alloy (2-10% P). Electroless nickel has the unusual quality of being amorphous and not crystalline in structure. These coatings possess high hardness, natural lubricity, and good wear and abrasion resistance.

Typical applications for electroless nickel include fasteners, pipe and valves. The coating thickness ranges from 2.5 to 150 $\mu$ m, but most components used for engineering purposes have a thickness of around 50 - 100 $\mu$ m.



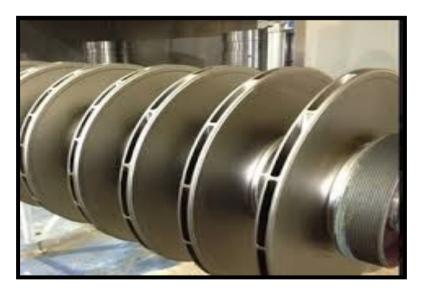
**Comparison of Deposit Uniformity** 

## **ELECTROLESS NICKEL PLATING**









## **ALKALINE ZINC PLATING**

Zinc coatings prevent oxidation of the protected metal by forming a barrier and by acting as a sacrificial anode if this barrier is damaged.

Zinc oxide is a fine white dust that (in contrast to iron oxide) does not cause a breakdown of the substrate's surface integrity as it is formed

•For better corrosion resistance the zinc layer is passivated. This can be in the colour blue, yellow, green or black, depending on the application. In some cases an organic top coat or a sealer is applied.

## **ALKALINE ZINC PLATING**



## Equipped with...



Lab for Chemical Analysis



PH Meter



DFT Meter



Weighing Scale



Conductivity Meter





## Management & Key Staff



**Mr Dinesh Patel – Managing Partner** is a 70 years old coating expert. He has rendered his services for big institution like Indian Space Research Organization, BARC and BHEL. He has done plating on many Components of INSATE Satellite.

Dinesh Patel has been designing troubleshooting, and applying his 30+ years of experience of plating in preparing systems which gives better and consistent quality.

## Management & Key Staff



 Mr. Tarang Guru– Managing Partner is a 40 years old with a graduate degree and passion for adapting new techniques. He is young, energetic and self-motivated. He has headed Coating division successfully for over 20 years.



Mr. Hitesh Sura – Unit Head is 62 years old. He is associated with the company since 1989. He is 1983 batch B.S.C. (chemistry) from Gujarat University. Over the years with his experience and his experienced team members, ENP TEHCNO ENGRS has been able to sustain high and good reputation in the market.



# Thank You

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