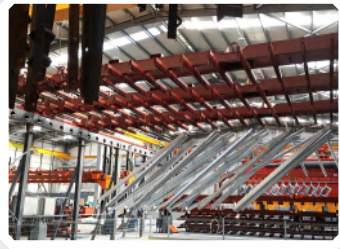


SURFACE TREATMENT EQUIPMENTS AND PLANTS



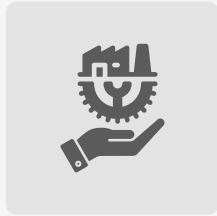
ABOUT STEP

Surface Treatment Equipments & plants (STEP) Techno Solutions was founded with the vision of providing world class products and solutions to the Surface Treatment Industry.

We specialise in large-scale Turnkey plants, undertaking a full range of Engineering, Procurement & Construction activities through project completion



Turnkey Project



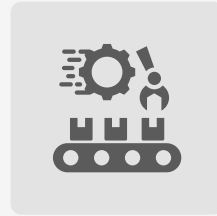
Project Consultancy



Engineering



Procurement



Manufacturing



Installation & Commissioning



Spare Parts



Plant Up-gradation



Repairs & Modification

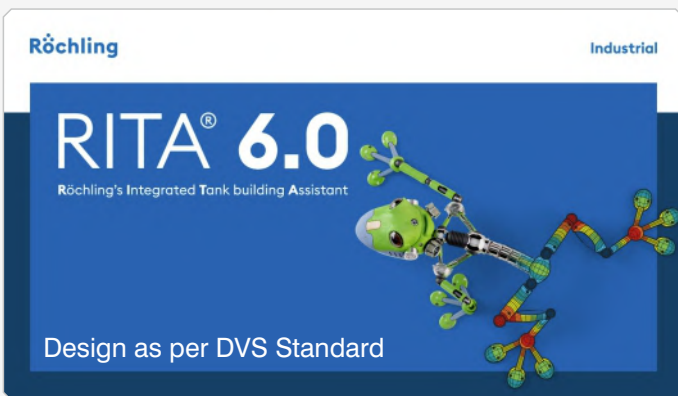


AMC

With our experienced team of various experts ranging from plastic and metal fabrication, design & engineering, project management, surface treatment chemistry and process automation, we provide the complete spectrum of products, services & solutions.

From Start to Finish, STEP techno Solutions is the engineering partner for Surface Treatment Industry.

Machine Based as per **DVS Standard**



STEPsmart® TUBE & PIPE PICKLING PLANT

We offer complete solution for Tube and Pipe Pickling plants, which are designed and manufactured using the modern technology.

Having many years of experience in the industry, we manufacture Tube & Pipe Pickling Plants that are custom made and we offer flexibility with regard to operations and programming to meet the needs of the industry.



100%
Leak Proof



**Maintenance
FREE**



OUR SOLUTIONS FOR TUBE & PIPE PICKLING PLANT

- ◆ STEPstrong® Process Tanks
- ◆ STEPsmart® Acid Fume Extraction Scrubber System
- ◆ STEPstrong® Acid Storage Tanks

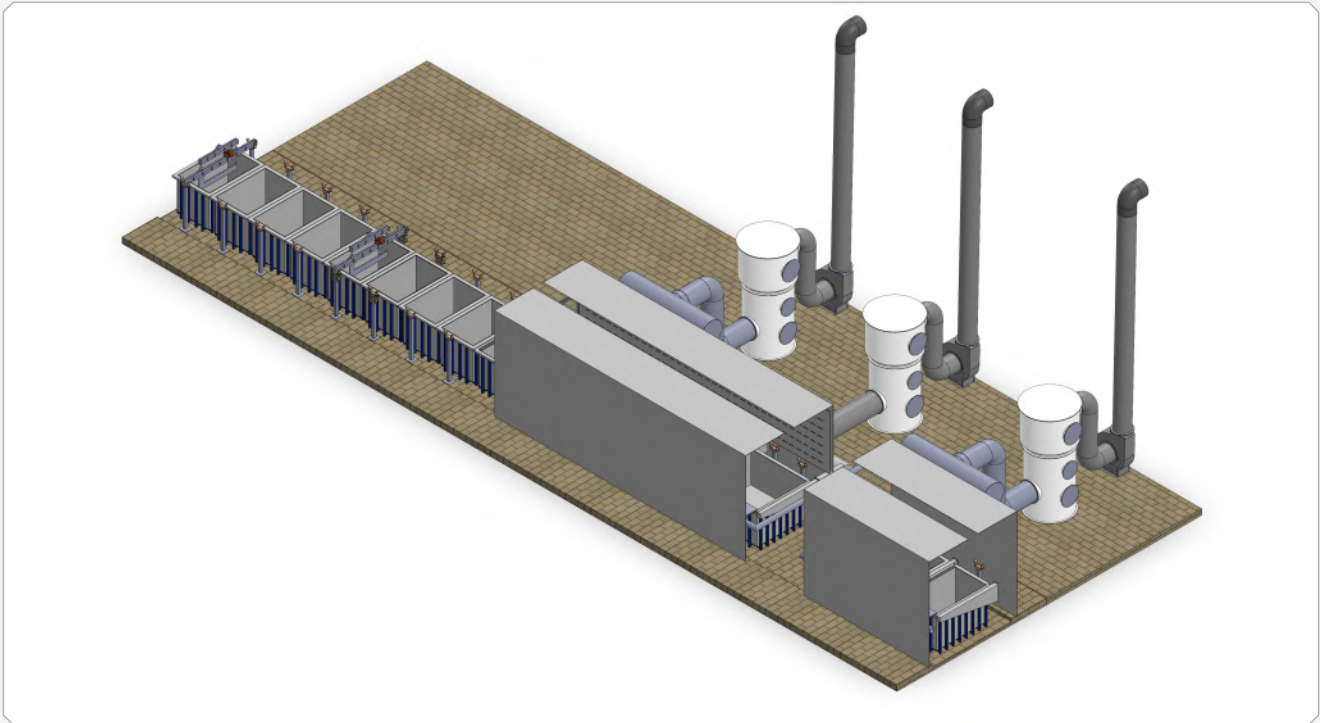
AVAILABLE ACCESSORIES

- ◆ Water Circulation
- ◆ Spreader (Bundle Breaker)
- ◆ Air Agitation
- ◆ Heat Exchangers
- ◆ Heaters

STEPsmart® WIRE AND COIL PICKLING PLANT

Efficient. Fumeless. Built for Continuous Production.

STEP offers advanced Wire and Coil Pickling Plants engineered for high productivity, consistent surface quality, and operator safety. Our systems are designed using German DVS welding standards and premium-grade polypropylene, ensuring long service life even under continuous pickling operations. From batch to inline fumeless pickling lines, STEP delivers solutions that reduce acid consumption, improve line speed, and comply with stringent environmental norms.



Key Highlights

- ◆ Batch & Inline Fumeless Pickling Systems
- ◆ Corrosion-resistant PP construction
- ◆ Integrated fume extraction & scrubbing
- ◆ Custom automation & process control
- ◆ Low maintenance, energy-efficient design

Scope of Supply

- ◆ Process Tanks and Pickling Tanks
- ◆ Acid Storage and Handling Systems
- ◆ Acid Fume Extraction & Scrubbing Systems
- ◆ Turnkey Engineering, Installation & Commissioning

STEPsmart® INLINE WIRE PICKLING PLANT

Inline Wire fumeless pickling line is most modern, cost effective, efficient and fast operating lines. We provide Pickling Tank with inside attachment with corrosion resistance material and latest manufacturing technology



OUR SOLUTIONS FOR INLINE WIRE PICKLING PLANT

- ◆ STEPstrong® Process Tanks
- ◆ STEPstrong® Acid Storage Tanks
- ◆ STEPsmart® Acid Fume Extraction & Scrubber System

STEPsmart® HOT DIP GALVANIZING PLANTS



Turnkey Galvanizing Solutions with Global Technology Collaboration

STEP designs and executes complete Hot Dip Galvanizing Plants tailored to your production needs, space constraints, and automation requirements. Our plants are developed with a focus on fuel efficiency, zinc recovery, safety, and long-term operational reliability.

With international collaboration and decades of process expertise, STEP delivers galvanizing plants that meet global performance standards.



Furnace



Hot Water Generator



Zinc Recovery System



Zinc Kettle



Flux Filtration System

Key Highlights

- ♦ Custom-engineered turnkey galvanizing plants
- ♦ High-velocity pulse-fired furnaces
- ♦ Zinc kettle supply & replacement
- ♦ Advanced fume extraction & enclosure systems
- ♦ Automation & modernization of existing plants

Services Include

- ♦ Design, Supply & Installation
- ♦ Process Consultancy & Commissioning Support
- ♦ Material Handling Systems
- ♦ Plant Up-gradation & AMC Support

STEPsmart® ELECTROPLATING PLANT

Precision-Driven Plating Plants for Consistent Quality

STEP designs and builds rack and barrel type electroplating plants with manual, semi-automatic, or fully automatic operation. Each plant is engineered to deliver uniform deposition, optimized cycle times, and reliable performance across a wide range of surface finishes.

Our integrated material handling & automation ensure repeatability, productivity, and process accuracy.



Key Highlights

- ◆ Rack & Barrel Plating Systems
- ◆ Complete process automation
- ◆ Accurate current density & contact time control
- ◆ Modular plant layouts for future expansion

System Components

- ◆ Pre-Treatment & Process Tanks
- ◆ DC Rectifiers & Dryers
- ◆ Acid Fume Extraction and Scrubber Systems
- ◆ Automated Material Handling Systems

STEPsmart® ANODIZING PLANT



Flexible Anodizing Solutions with Future-Ready Design

STEP anodizing plants are designed with scalability, precision, and automation in mind. From manual to fully automatic systems, our plants support a wide range of anodizing and colouring processes with consistent quality and excellent surface finish.

Types of Anodizing Offered

- ◆ Hard Anodizing
- ◆ Sulphuric Acid Anodizing
- ◆ Boric-Sulphuric Acid Anodizing
- ◆ Chromic Acid Anodizing
- ◆ Tartaric-Sulphuric Acid Anodizing

Key Highlights

- ◆ Integrated heating, chilling & rectification
- ◆ Advanced fume extraction systems
- ◆ Automated material handling
- ◆ Designed for architectural & industrial applications

STEPsmart® PHOSPHATING PLANT



Reliable Surface Preparation for Superior Coating Performance

STEP designs & manufactures phosphating plants tailored to deliver consistent coating quality, excellent corrosion resistance, & reliable process control across diverse industrial applications. Each plant is engineered with stable bath chemistry, optimized heating, and controlled processing parameters.

Types of Phosphating Offered

- ◆ Zinc Phosphating
- ◆ Manganese Phosphating
- ◆ Iron Phosphating
- ◆ Tri-Cation / Nano Phosphating

Key Highlights

- ◆ Engineered for uniform coating weight & adhesion
- ◆ Optimized tank layout for stable chemistry control
- ◆ Energy-efficient heating and circulation systems
- ◆ Suitable for manual, semi-automatic & automatic plants

Plant Configuration

The number of tanks and process sequence can be configured and fully customized based on:

- ◆ Component geometry & material
- ◆ Production volume
- ◆ Coating specification
- ◆ Degree of automation required

STEPsmart® POWDER COATING PLANTS



- ◆ We offer complete product line of equipment & systems designed to meet a wide variety of demanding production requirements
- ◆ We manufacture highly efficient Powder Coating Plants with latest technology designed for optimum production, high corrosion resistance, durability, precision designing, easy installation, optimization of energy & space, easy cleaning and cost effectiveness.

COMPLETE SOLUTION FOR POWDER COATING PLANTS

- ◆ Powder Application
- ◆ Curing

Our Powder Coating plants include the following:

- ◆ STEPstrong® Pre-Treatment Tanks
- ◆ STEPsmart® Fume Extraction & Scrubber System
- ◆ STEPstrong® Storage Tanks
- ◆ STEPsmart® Spray Booth
- ◆ STEPsmart® Material Handling System
- ◆ STEPsaver® Heating Oven

STEPstrong® CUSTOMISE PROCESS TANK

Built to Withstand. Engineered to Perform.

STEP manufactures customized process tanks designed for demanding surface treatment applications. Our tanks offer superior chemical resistance, high impact strength, and long operational life, making them ideal for aggressive process environments.



Applications

- ✦ Pickling
- ✦ Electroplating
- ✦ Powder Coating
- ✦ Water & Effluent Treatment
- ✦ Galvanizing
- ✦ Phosphating

Tank Construction Options

- ✦ PP-H, PP-C, HDPE, PVC, PVDF, ECTFE

Dual-layer constructions

- ✦ PP+FRP, PVDF + FRP, ECTFE + FRP



Process Tank



Electrowinning Cell



ETP Tank



Dual Tank

STEPstrong® ACID / CHEMICAL STORAGE TANKS

STORAGE TANKS

- ✦ We provide storage solutions for safe, leak proof and easy handling of corrosive and hazardous liquids for various industries meeting specific requirements of chemical compatibility, temperature, gas vents etc.
- ✦ We provide storage solutions with various MOCs , for e.g. (single material layers) PP-H, PP-C, HDPE, PVC, PVDF, ECTFE as well as (dual material layers) PP + GL,PP + FRP,PVDF + FRP,ECTFE + FRP,PVC + FRP etc.
- ✦ Our Storage Tanks are equipped with accessories and attachments like Nozzles, Valves, Level Indicators, Ladder, Platform etc. as per our customer's requirements



STEP Storage® Tanks are manufacturing use in

- ✦ Surface Treatment (Fe & Non Fe Metals)
- ✦ Chemicals & Dyestuff
- ✦ Textile Processing
- ✦ Food & Beverages
- ✦ Pharmaceuticals
- ✦ Effluent Treatment Plants
- ✦ Tube & Wire

AVAILABLE ACCESSORIES

- ✦ Level Indicator
- ✦ Connections
- ✦ Stirrer
- ✦ Ladder with Railing & Platform
- ✦ Stirrer Mounting Arrangement



STEPsmart® FUME EXTRACTION & SCRUBBING SYSTEM

- ♦ We Design, Engineer and Manufacture Acid/Zinc Fume Extraction and Scrubbing Systems with 100% non metallic contact parts to provide a healthy & safe internal and external environment for Surface Treatment Industries.
 - ♦ These systems are tailor made in accordance with the manufacturing process conforming to the strictest environmental norms within the space available at site.
 - ♦ Our expertise in design, manufacturing and installation of fume extraction systems enable our customers to provide a safe and healthy internal and external environment while adhering to applicable emission standards.
 - ♦ STEP Fume extraction systems are integrated with suction channels in the lateral side walls of the tank to install manual/automatic covers on high temperature baths provide great advantage to the end user.
- **HCL**
 - **HF+HNO3**
 - **Mixed acids**
 - **Zinc Fume**

And have proven to be effective even in dusty environments in process plants.

- ♦ We Design, Engineer and Manufacture Acid/Zinc Fume Extraction and Scrubbing Systems with 100% non metallic contact parts to provide a healthy & safe internal and external environment for Surface Treatment Industries.



STEP INNOVATION

We design automatically operated fume extraction systems.

- ♦ STEPsmart® Fume extraction Systems are driven by PLC which gets a signal from the material handling system during downward and upward operations of the crane ensuring the operations of the blower only when needed.
- ♦ This results in 30-50% lower energy consumption compared to conventional fume extraction systems which are run on a continuous basis even at times when there is no fume generation.

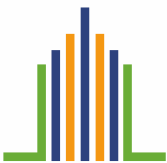
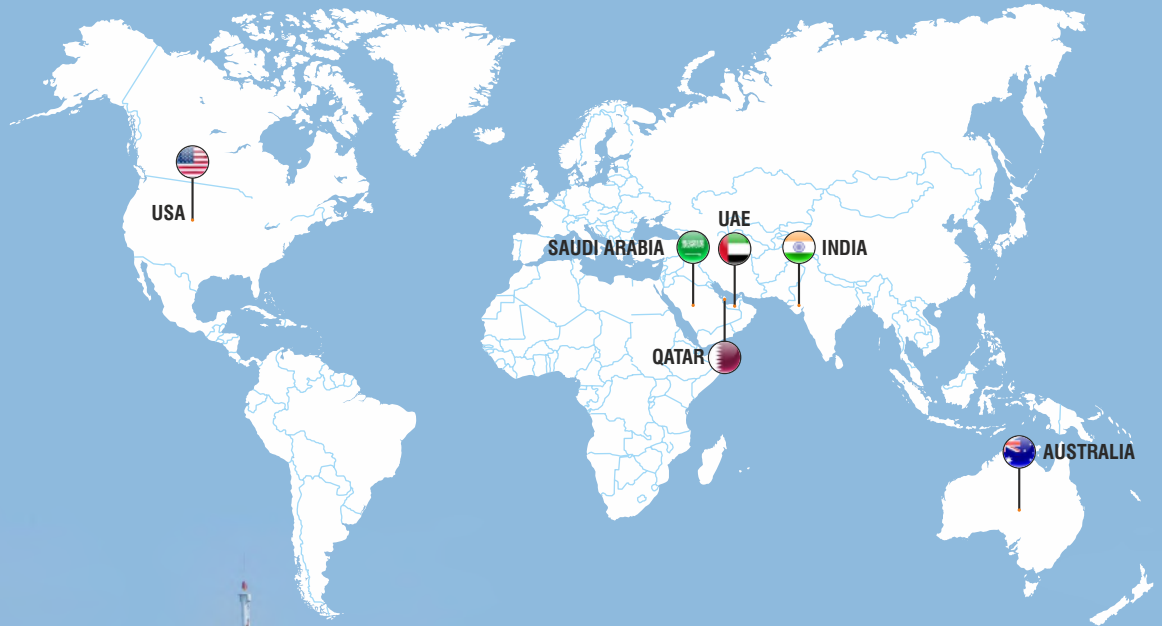
STEP CREDENTIALS



STEP GROWTH PARTNERS



OUR FOOTPRINT



STEP TECHNO SOLUTIONS LLP

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Changodar Plant : Block No. : 52 & 74, Within the Sim of Village Mouje Vasna,
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SCAN FOR CONTACT

