

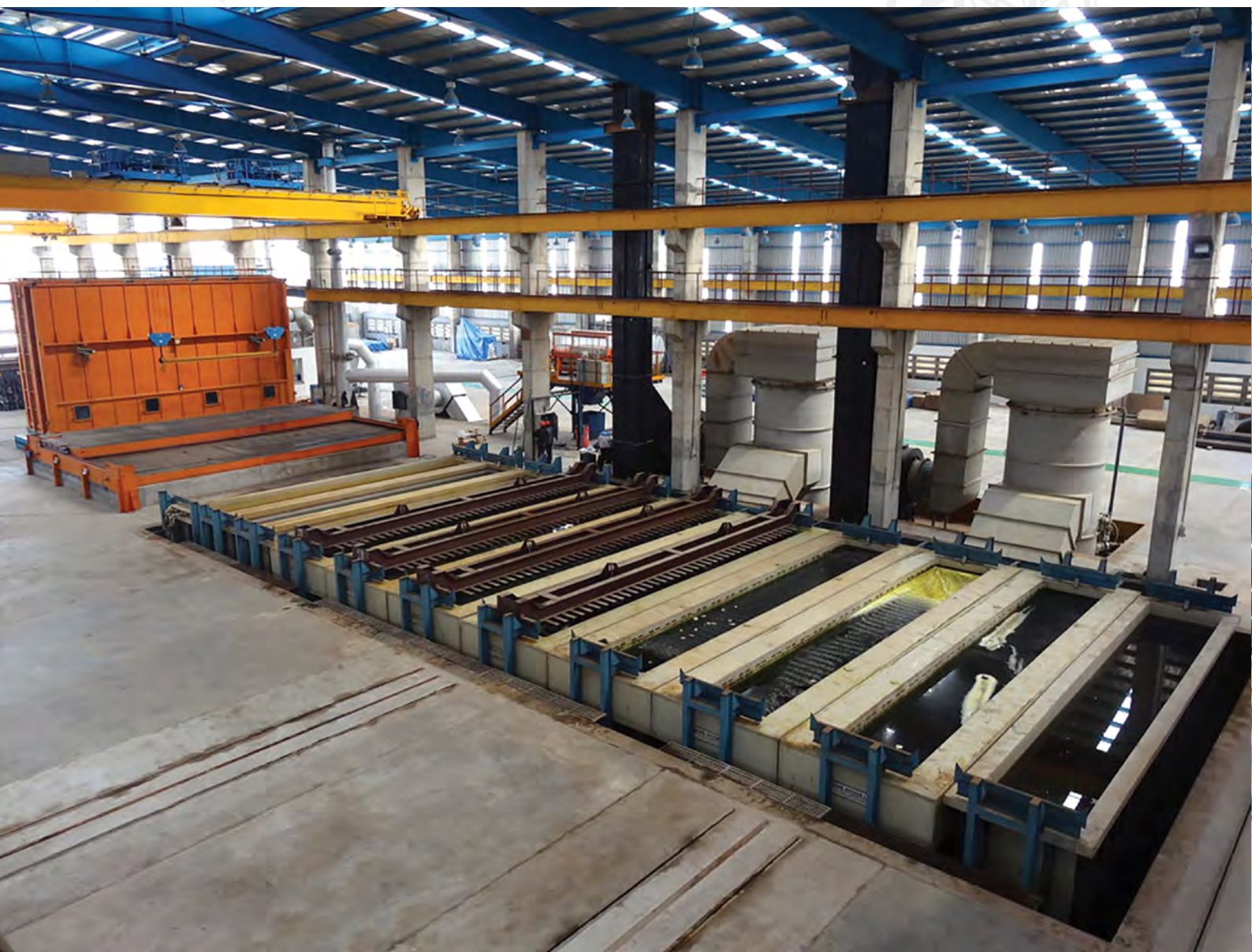


CORROTECH

**suppliers of complete
galvanizing plant
worldwide**



complete galvanizing plant



Fully automatic galvanizing plant equipment.
Pulse fired, high velocity, dual fuel furnaces.
Re-circulating hot air dryer, waste heat recovery systems.
Polypropylene tanks for degreasing, pickling, rinsing & fluxing.
Flux regeneration & filtration plant, flux heating system.
Fume extraction systems for acid & zinc, fume enclosures.
Quench & passivation tanks.
Work jigs, drosser, kettle cover, skimmer, ash buckets.
Jigging & unjigging stations.
Plant layout, design & project consultancy



PULSE FIRED HIGH VELOCITY FURNACES

Corrotech designs highly efficient and reliable pulse fired galvanizing furnace delivering the best performance in low fuel & zinc consumption, high productivity with less maintenance.

- ◆ Fully automatic design with auto ignition, flame safeguard controls
- ◆ Control panel equipped with PLC, HMI & SCADA systems
- ◆ Thermal protection by insulating the furnace with ceramic fiber & modules
- ◆ Simple design & easy to maintain

benefits

Fuel savings; efficient firing setting, maximum heat transfer with minimal fuel input.
Higher product quality and production rates.
Low ash and dross formation.
Long kettle life.
Low in maintenance.
Lower NOx; burners operate at high fire with low excess air.



other design features

Variants include dual fuel (oil & gas), oil (LDO/furnace oil), gas (PNG/LPG), electrically operated.
Uniform furnace temperature; burners fired at their highest exit velocity.
Burner firing cycle is monitored by the process controller within the PLC.
Automatic temperature controls for flue gases and molten zinc.
Motorised valve for precise combustion air control.
Retractable high Ni/Cr props for kettle supports. Kettle installed with heat shields & dross protection.
Base refractory to maximize fuel efficiency.





re-circulating hot air dryer

Corrotech high-efficiency re-circulating hot air dryer is designed to pre-heat the structural steel by circulating the exhaust flue gases generated out of the furnace without any need of auxiliary burners. Applying the principles of heat transfer, the hot air at a controlled temperature is uniformly circulated around the steel parts across the pit for the rapid drying process.

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design features

- Two door system, insulated dryer covers.
- Motorized end carriage.
- Multiple jig resting stations.
- Uniform hot air distribution throughout the pit.
- Programmable digital temperature control.
- Motorized air damper to achieve constant temperature.
- Insulated Centrifugal fan operating at high air volume.
- Pitot tubes to measure the differential pressure.

benefits

- Reduce zinc consumption
- Fully eliminate zinc splash
- Minimize electrical energy consumption
- Increase galvanizing production volumes
- High product quality
- Good housekeeping in the workplace
- Safe working environment
- Energy conservation



flux heating system

- “Multi tube pipe” type heat exchanger.
- Utilizes the hot water of the quench tank to heat the flux solution.
- Designed for temperatures, pressures, and capacities as per process need.
- Automatic temperature control system.
- Fabricated out of SS 316L seamless pipe.
- Perforated polypropylene sheet to protect SS coil.
- Laid across the length of tank.
- Temperature uniformity across the tank resulting in efficient fluxing
- Equiped with PID controller, liquid flow switch, water pump, strainer and bleed points.



flux regeneration system

Corrotech flux regeneration system controls iron, zinc chloride and ammonium chloride in flux, temperature and pH to operate within the needed process parameters. Our system comes with advanced technology that results in the lowest consumption of zinc & excellent product quality.

design features

- Flux treated in continuous cycle.
- Fully automatic system with PLC controls.
- Convert Fe^{2+} into Fe^{3+} to sludge.
- Control of flux process parameters.
- Filter system for the sludge.
- Dosing pumps with pH & ORP controls.
- Probes attached with pH & ORP transmitters
- Mixer for dissolving reagent.

benefits

- Reduces zinc consumption.
- Minimizes the transfer of iron to molten zinc.
- Reduces ash and dross generation.
- Flux operates with at a low iron concentration.
- Iron removal from solution during production.
- Lowers flux consumption.
- No black spots or Zn Ash residues on the galvanized piece.
- Ensures product quality.



pre-treatment plant for galvanizing lines



Corrotech manufactures high quality and durable polypropylene (PP) tanks for galvanizing plant.

design features

- Rochling Integrated Tank Building Assistant – RITA software
- Custom design according to size & weight
- Weld preparation for steel structure - as per AS 1554
- Surface preparation by grit blasting as per SA 2.5
- Easy to modify and repair
- Inbuilt jig resting arrangement
- Floor plates resting fixtures

process application

- Degreasing tank
- Pickling tank integrated with fume suction duct
- Rinsing tank
- Fluxing tank

manufacturing process

- Adhere to DVS (german standards)
- Butt fusion joints in main body
- 90° fold bending to produce “U” profile
- Butt fusion joints in end wall
- Acid proof fiber glass lining on steel frame

acid fume extraction system



Corrotech acid fume extraction systems

are installed to remove and purify the acidic fumes from multiple pickling tanks that are connected to wet scrubber to absorb toxic particles from the air streams using water to scrub the air.



suction slot duct

Designed at a predetermined minimum duct velocity.
Manufactured using chemical corrosion resistant Polypropylene or PP+FRP

wet scrubbers

Designed for ZERO discharge and acid neutralization
Equipped with powerful, energy-efficient fans and high-quality scrubbing media
Packing media includes rings and saddles in various materials
Wet spray system to remove toxicity
Non-clogging spray nozzles for wetting packing.
Second stage mist eliminator to remove moisture prior to exhaust discharge

benefits

Minimize risk and health hazard
Increase life of roof structure and cranes by eliminating corrosion
Lower plant maintenance by reducing failures in electrical components
Prevent unpleasant odor

zinc fume extraction system

Corrotech zinc fume extraction system complies with local and global environmental regulations, standards, pollution control norms, ISO Limit Values and OSHA

fume enclosures

lip extraction duct design



fume enclosures

- Crane mounted enclosure for cross shop layout.
- Fixed fume enclosure for in-line shop layout.
- Efficient, uniform, lateral extraction.
- Pneumatically and hoist operated doors.
- Splash-proof.
- Easy accessibility for skimming zinc ash.
- Viewing windows having toughened glasses fixed over a steel frame.
- Equipped with sodium vapor lights mounted on the roof of the enclosure.
- Designed for its easy removal during the replacement of kettle in the future.
- Extraction duct is placed on the roof connecting with the bag filter / cyclone and scrubber.

lip extraction design

- Fumes are extracted through a sheet metal suction duct mounted on the furnace sides.
- Suction slot dimensions are based on the extraction area of and the volume of fumes generated.
- Suction velocity is optimal to drag out the fumes over the top of the furnace.
- Suction duct area is gradually reduced to eliminate the friction losses.

wet scrubber with cyclone



bag filter



surface treatment tanks



design features

100% Leak proof reliable and fail proof weld joint.
Longer life. Weld strength as good as parent material.
CNC program console for consistent performance.
Light in weight.
Chemical, corrosion & abrasive resistance.
Easy to clean and maintain.

material of construction

Polypropylene (PP-CP + PP-HP)	PP-FRP
HDPE	PE-FRP
PVDF	PVC-FRP
PVC	PVDF-FRP
FRP (GRP)	FEP-FRP
ECTFE	ECTFE-FRP

user industries

Hot Dip Galvanizing	Food Industries
Steel Industries	Beverages Industries
Chemical Industries	Powder Coating Industries
Effluent / Water Treatment Plants	Agro-Chemical Industries
Electroplating Industries	Battery Manufacturing
Pharma Industries	Petro-Chemical / Fertilizer Industries
Anodizing Industries	Automotive Industries



industrial storage tanks



design features

Tanks designed using RITA software, developed by Rochling and TUV Nord.
Adherence to the DVS quality standards.
Produced using butt fusion welding technique that guarantees 100% leak proof performance.

benefits

- Leak proof
- Easy to move
- Easy to clean
- Anticorrosive
- Low maintenance
- Less cost
- Long life

various shapes

- Horizontal storage tank
- Vertical storage tank
- Open top storage tank
- Close top storage tank
- Conical bottom storage tank
- Conical top storage tank
- Custom made

material of construction

- Polypropylene (PP)
- HDPE
- PP + FRP
- FRP
- PVDF
- PVDF + FRP
- PVC



other products & services



quench tank



passivation tank



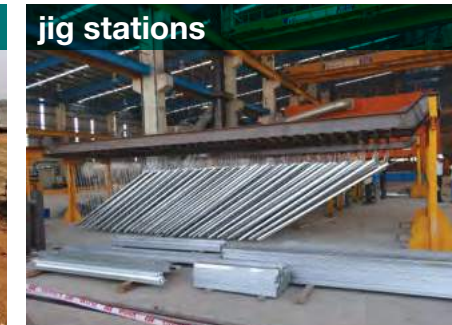
insulated kettle cover



ETP



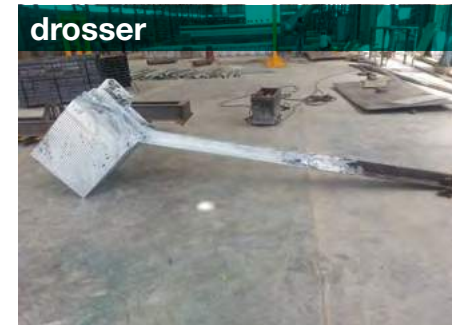
jig stations



work jig



drosser



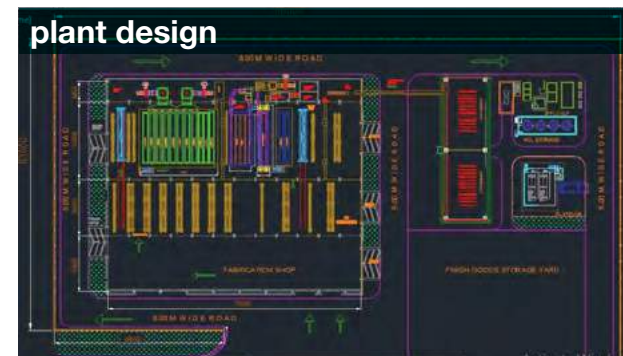
top heat ceramic bath



centrifuge machine



plant design



annual maintenance contracts



round the clock assistance



spare parts supply



material handling systems



**valuable
customers**



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PIPES AND TUBES



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