

# **PADMATECH**

**INDUSTRIES PVT LTD** 

Premier Engineering Company for EPC
Projects and Turnkey Equipment Supplier
for Various Industries

PADMATECH INDUSTRIES PVT. LTD. www.padmatech.in

# **OUR PROFILE**



### **Vision:**

To deliver energy efficient industrial solutions and help the environment go green while offering safe and healthy life to the people.

## Mission:

"Maintain the competitive market position by providing excellent quality and high standard industrial solutions at a reasonable price and committed delivery"

### **ABOUT US:**

We at Padmatech Industries Pvt Ltd certified by ISO 2009:2015 for dedicated to the design, manufacture, installation and commissioning of industrial EPC projects and processing equipment. We are Padmatech Industries offers single items through to turnkey projects, engineered and manufactured under the one roof.

Padmatech team provide quick support with personal attention dedicated to customer needs, project engineering, installation, commissioning and after sales service.

A comprehensive range of Padmatech's designed and manufactured equipment supported by latest technologies and supply agreements, ensures our customers receive the latest proven technology. Our flexible, advance manufacturing facilities ensures ruggedly constructed, quality assured, timely delivered products, compliant with the highest universal standards.

All engineered solutions are designed incorporating to Health and Safety, environment standards and independent certification in quality, also ensuring worker ergonomics and sustainability.

### **OUR CORE VALUES:**

- Customer Service above all else.
- Elevation of Indian National Status.
- Encouraging individual ability and creativity of employees.
- Business Ethics.

## **OUR BRAND PROMISE:**







# **COMPANY OVERVIEW**

### **ELECTRICAL & AUTOMATION:**

Our experienced Electrical Engineering Department can customize an electrical solution for single equipment items through to full recipe based on ROCKWELL / HMI Scada plant wide control solutions, utilizing the latest in Allen Bradley or Siemens processors. Software development for upgrades and integration with existing system or other equipment providers can also be catered for. Hazardous fume or dust environments are a specialty with full compliance documentation and certification provided. Equipment pre-wiring and factory acceptance testing, reduces onsite installation, site acceptance testing and commissioning of our electrical systems.

### INSTALLATION, COMMISSIONING AND TRAINING:

Having PADMATECH undertake the complete project, including Project Management, Installation, Commissioning and Training, helps to ensure a seamless incorporation of equipment into your facility. It also reduces the integration and interface risk, Regardless of geographic location PADMATECH has multi-disciplined personnel who can seamlessly integrate your system using your team or ours. On completion of commissioning PADMATECH will undertake staff training including operations, mechanical and electrical maintenance to ensure your team has a full understanding of the PADMATECH equipment. A comprehensive Operation and Maintenance Manual is supplied with all equipment including any relevant certification and risk assessments.



# **CHEMICAL TURNKEY PROJECTS:**

We undertake Turnkey Projects for Resin Plant / Bulk Drugs/ Intermediate Chemical Processing and API manufacturing plants, etc. To conduct various types of reactions, the unique equipment and design allows the following unit operation to be conducted efficiently such as Solvent recovery, distillation, liquid- liquid extraction, phase separation, dissolution, deemulsification, heating, cooling, blending, degassing, flash distillation etc.





**CLEAN ROOM** 



**REACTOR** 

## - Our equipment with capacity range -

Vacuum reactors (1KL to 40KL) | Cryogenic Reactors (1KL to 40KL) | High Pressure Reactors (1KL to 40KL) | Columns (100 NB to 400 NB) | Condenser(2m<sub>2</sub> -200m<sub>2</sub>) | Receiver (Capacity -500 L to 100 KL) | Piping Works | Centrifuge from 12 inches to 48 inches | Vacuum Tray Dryer (2m<sub>2</sub>- 100m<sub>2</sub> Area) | Atmospheric Tray Dryer(2m<sub>2</sub>- 200m<sub>2</sub> Area) | Chemical Storage tanks and Material handling system.

# PROCESSING EQUIPMENT

#### **BIO - FERMENTATION:**

PADMATECH INDUSTRIES PVT. LTD. offers a complete range of fermenters to the life science industry. These include skid mounted mammalian cell culture reactors and fermenters. Coupled with extensive offerings, both upstream and downstream of the biological core process, these bio-reactors and fermenters form the nucleus of a full integrated bio-process suite. Fermenter Designs for both mammalian and pro-Karyotic system range from a working volume of 20 to 1,00,000 Litres. Completely integrated CIP (Clean-In-Place) capability is available by integrating Padmatech Industries Pvt. Ltd CIP system with the reactors. This feature enables complete CIP testing during factory acceptance testing (FAT) and ensures that the vital integration between process equipment and cleaning system supply equipment is done right

We at Padmatch Industries, design systems with building blocks such as

Vessel assembly | Agitation system | Inlet gas handling and exhaust system

Temperature control system | Liquid addition system

Instrumentation system and control





**BIO - FERMENTER** 

The process dictates the selection of the appropriate functional blocks. Our team of technical specialists are experts in configuring and customizing a reactor to meet a wide range of operational requirement.

# **LIQUID, POWDER MIXING EQUIPMENT:**

We manufacture two types of high speed mixer as per customer's specification and /or application.

- 1) Single Shaft Mixer
- 2) Twin Shaft High Speed Mixer

All contact parts in our mixer are made of various grades of SS 316/304 as per application. Unique features of our Mixer

- Drum Locating and centering device.
- Clamping Device for Tub.
- Hydraulic up and Down Maintenance free application.
- Flame proof panel With flame proof Motor and VFD.
- Special Spinal bearing use.
- High precision machining done in such a way that a running shaft cannot be distinguished from a static one.
- · Noise Free.
- · Easy loading and unloading,
- · Minimize equipment cost,
- Minimize Operating cost.
- Zero Dead stock of Liquid



HIGH SPEED MIXER

### **BLENDER:**

Industrial mixers and blenders are widely used to mixer and / or blend variety of materials used in different food, chemical, pharmaceutical, plastic and mineral industries etc. Blenders from Padmatech include Ribbon & Paddle designs and range in capacity from 100 Kg/ Hr. factory models to 5000 Kg/Hr. production units. A wide variety of horsepower and speed combinations satisfy the most demanding blending applications. Optional features such as sanitary designs, vacuum construction, special valves and cover openings can be provided to fine tune the machine to your process.



- We Also Offer Different Types Of Blenders As Per Application -

Mixer Paddle Blender | Cone Blender

# **POWDER GRANULATION PLANT**

We provide total solution for Powder Processing required in Foundry Chemicals.

### **Roll Compactor:**

We are manufacturer in an ideal roller compaction system for dry granulation of pharmaceutical powders, Polymers and Chemical Industries. Our roll compactor provides optimized granulated material to improve downstream powder flow characteristics and subsequent maximized tableting efficiencies, achieved via a unique precompression feed system and precision real-time roll gap control for production purpose from ranging 100 Kg/Hr. to 2000 Kg/Hr.

## Our Granulation equipment range includes

Ribbon Blender • Roll Compactor • Granulators • Sieve Shaker



#### **ROLL COMPACTER**

We offer Granulation solutions for Mixing and Moisture separation, Heating System to achieve homogeneous product Quality.

#### **HEAT EXCHANGER:**

A shell and tube exchanger consists of a number of tubes mounted inside a cylindrical shell. Two fluids can exchange heat, one fluid flows over the outside of the tubes while the second fluid flows through the tubes. The fluids can be single or two phase and can flow in a parallel or a cross/counter flow arrangement.



**RADIATOR** 

There are two main categories of Shell and Tube exchanger:

- 1. Those that are used in the petrochemical industry which tend to be covered by standards from TEMA, Tubular Exchanger Manufacturers Association (see TEMA Standards);
- 2. Those that are used in the power industry such as feedwater heaters and power plant condensers. Essentially there are three main combinations
- Fixed tube sheet exchangers Floated heat exchangers
- U-tube exchangers

The Different types of heating and Cooling Equipment we make are:

- Hot Air Oven
- Steam Radiators
- Heat Exchangers
- Quenching Tank
- Hot Water Generator

# **FABRICATION**

## PRESSURE VESSEL & EXOTIC ALLOY FABRICATION:

We are also engaged in Stainless Steel Fabrication in all grades of Material. We process Stainless steel along with exotic alloys at our works. We use state of the art designing software like solid edge and DESCOS Exotica for design of pressure vessels, as per ASME Section VIII, Div. 2. Our Welding team is TUV accredited and we have WPS, WPQR. WPQ is under third party inspection. We also execute work on stamp transfer requirement. Our Production team and Quality Assurance personnel are well trained

# - We process following metals -

SS304, SS304L SS316, SS316L | Duplex 2205 Inconel 500, 600 | Tantalum Monel 400 Hasto alloys C 276 HC 22, B1,B2, Incoly 825, 904 L, Alloy 22



## - We offer two type of Services -

1) Equipment manufactured as per Customer's Design and as per fabrication Codes. (Custom Build)
2) Equipment and fabrication as per Customer Specification and Padmatech Design.

# **MEE TURNKEY PROJECTS**

# **ZLD (ZERO LIQUID DISCHARGE)**

### **Design Considerations:**

- We are proud to deliver environment friendly solutions which help Green & clean environment criterion.
- We commit ourselves as the highest utility saver design company operating in this field.
- We are turnkey suppliers for providing perfect solution for the ETP (Effluent Treatment Plant) & MEE (Multiple Effect Evaporators) systems in various fields like Chemicals, Paper & pulp, Food & pharmaceuticals, Alcohol plants, Brewery plants, Oil industries etc.
- To a large extent, our designs are customised to achieve full satisfaction of customer expectations. A suitable system is designed on the basis of composition of effluent to be treated.
- Most of the cases end product is in solid powder form which is easy to dispose. Recovered solvent is stored separately, purified to desired concentration & recycled back to process. Liquid obtained after evaporation is mainly clear water. This can be recycled in process plant for reuse.







#### Plant features:

- Skid mounted unit for small capacity plants
- We deliver plants as Fully automatic or Semi-automatic or Manual operation with ease in operation as per customer requirement
- Compact layout
- Plant operation cost is optimally low.
- With complete mechanical & electrical installation in-house facility
- Quick service to our customers even after execution & warranty/ guarantee period over
- Highest utility saver designs
- Highest condensate & heat recovery
- Minimum operation & investment cost for customers
- Our Plants are always designed considering future expansion requirement also.
- We deliver plants for smaller to larger all capacities
- Easy to operate

# **TURNKEY PROJECTS**

### **EVAPORATION / CONCENTRATION PLANTS & DRYERS :**

We are the manufacturers and suppliers of all kinds of Evaporation/ Concentration plant and various drying system required for various application such as fruit and vegetables, juices, industrial effluents, chemicals, bio products, etc. As per product requirement we suggest our solution to our customers for shell and tube type evaporators, plate & frame type evaporator, falling films as well as forced circulation evaporators. Our products are designed as skid mounted plants for smaller capacities and compact layout configuration. We delivered the plants with fully automatic/ semi automatic/ manual operators as per customer requirements.

# **Special Purpose Machines (SPMs):**

We support our customers for their need to enhance productivity, optimize process, performance and safety to enable achieve their manufacturing goals to their full satisfaction.

### **Features**

- SPMs minimize the human errors and reduce human exhaustion in carrying out recurring operations repeatedly.
- Our Special Purpose Machines are entirely product specific and thus these machines are designed and developed for each specific requirement.
- Highest level accuracy in production level, efficient performance, accelerated production all in single machine.
- Our SPMs are manufactured aiming at less energy consumption, less production time and less wastage material.
- Easy available of spare parts or wear and tear parts
- We design and manufacture our SPMs with latest engineering standards.
- Assured satisfaction.



### - OUR FEW PROJECTS -

Needle Filling Machine | Press Out System | Hot Plate

# **SALES & SERVICES**

### WITH YOU ALL THE WAY

You will never experience long communication lines if you are in need of support, because a Padmatech representative is never far away. Our sales and service staff can help you solve any problem that might arise. They can design new solutions and in cooperation with you extend your production facilities further. Padmatech continues to assist you during start-up and training of your employees to operate and maintain the machinery – all as part of a complete after – sales support program that spans the entire globe.

#### SPARE PARTS - to keep your equipment up to date

You will always experience swift delivery of any spare parts. Standard spare part are available in stock, and special parts can be made to order. This ensure high production safety, less downtime, maximum lifespan of existing components and continuous upgrades to the very latest components.

#### START - UP AND TRAINING

Years of manufacturing experience combine with great attention to detail guarantee to the superior quality. Our primary goal is to design, supply, service and support solutions that perfectly match your needs.

Our engineers ensure that all the technical aspects of installation and start-up run smoothly. They also guide your key personnel through a basic training program

#### INSPECTION AND MAINTENANCE

A Padmatech service agreement promises complete peace of mind including yearly inspections and regular on-site maintenance.

# - World- Wide Customers & Branches -





























#### **Our Client Locations**





















## PADMATECH INDUSTRIES PVT. LTD.

## - Registered Office -

Unit 1- Plot No. 219, Sector No. 10, PCNTDA, Bhosari, Pune - 411 026

#### - Works -

Unit 2- Plot No. 239, Sector No. 7, PCNTDA, Bhosari, Pune - 411 026

Unit 3 - Plot No. A-10, Newasa Industrial Area, District – Ahmednagar, Maharashtra, INDIA.

+91 9822 55 2882, + 91 7030 90 0336 marketing@padmatech.net | marketing1@padmatech.in service@padmtech.in Quality System: ISO 9001:2015 TUV (SUD)

#### **Our Branches**

Pune, Maharashtra | Vapi, Gujarat | Jaipur, Rajasthan