



PADMATECH
INDUSTRIES PVT LTD

98% Uptime

Engineering Reliability &
Efficiency at its Best



From The Desk Of The Managing Director

Dear Valued Partners,

Greetings from Padmatech Industries Pvt. Ltd.

Established in 2005, Padmatech Industries has emerged to be the premier EPC Company partnering for the turnkey equipment supplies, process equipments manufacturer and EPC projects with key sectors like Chemical, Pharmaceutical, API, Bulk Drugs, Bio-tech, Petrochemicals, Beverage, Refinery, Oil & Gas and Foundry Chemical industries.

We have set up two State-of-the-Art manufacturing plants at MIDC, Bhosari (Pune) and one more at Newasa, Dist. Ahilyanagar. Mr. Somnath Navale, Director (Operation) is at the helm of all production activities. As we continue to grow and innovate, our commitment to excellence, safety and environment friendly solutions remains at the core of everything we do. Integrity and customer satisfaction are our core values that shape our approach and inspire us to deliver the best. We are a team of highly talented and experienced engineering professionals, who work relentlessly to exceed your expectations. By 2030 we will be 500 cr. Company.

Over the years, we have established the distinct identity of providing exceptionally efficient and reliable products in the specified timeline. As a part of our Brand promise, we proudly proclaim that our products function with 98% uptime, with astonishing consistency, day in day out. This outstanding efficiency avoids production loss to our customers and promise trouble-free, non-stop working.

We are here to provide innovative and environment friendly solutions that reduce metal consumption, thereby reducing carbon emission. We provide zero liquid discharge (ZLD) plant along with chemical, API, Biotech and Brewery plant along with other process industries which ensures enormous saving of water.

As we continue our glorious journey, we are excited to embrace the new challenges and opportunities. On the strength of your trust and our unwavering commitment, we will succeed in establishing our distinct footprints on the global scale.

Mr. Kishor Navale

Director - Marketing

Somnath Navale

Director - Operation

98%

Uptime
Our Brand Promise

Our products run with 98% Uptime throughout the year and for years together. That's our Brand promise. Our products run at full efficiency and consistency for 359/365 days during the year, without any exception. Our record as on 31st March 2024 is 99.65%



Our Area Of Expertise

- SS Reactors
- Vessels / Tanks
- Mixers
- Agitators
- Blenders
- Process Equipment
- Dryers
- Granulation Equipment
- Brewery & Winery Plant
- MEE Plant/ZLDS Plant
- Turnkey Plants
- Biotech



VISION

To be the most successful company in the world to provide energy efficient and environment friendly solutions that help the environment to go green.



MISSION

To provide innovative turnkey solutions for EPC projects and process equipment with commitment to advance technology and on time delivery with best quality.



CORE VALUES

Customer Service
above all else

Elevation of
National
Status

Encouraging
ability and
Creativity of
employees.

Maintaining
following
business
Ethics

Honesty

Under Promise
& Over Deliver

Integrity

Loyalty

Law
Abiding

Safety

Reactors / Vessels (GMP & Non-GMP)



Essential equipment designed for controlled chemical, biochemical, and pharmaceutical processes.

High-Pressure Reactor

A high-pressure reactor is a specialized vessel engineered to operate under elevated pressures, facilitating chemical synthesis. It functions by using reinforced structures to maintain high-pressure conditions essential for reactions requiring extreme environments. Common applications include polymerization, hydrogenation and advanced high-pressure research.

Cryogenic Reactor

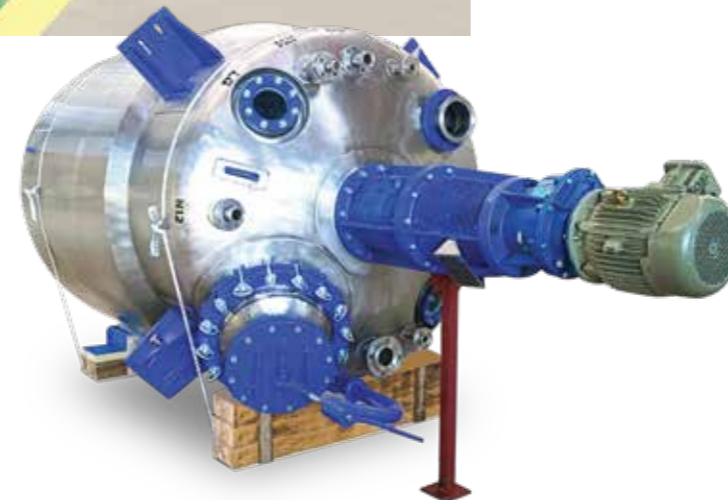
A specialized reactor designed for processes at extremely low temperatures. It operates by maintaining sub-zero conditions using liquid nitrogen or other cryogenics to regulate exothermic reactions.

Hydrogenator Reactor

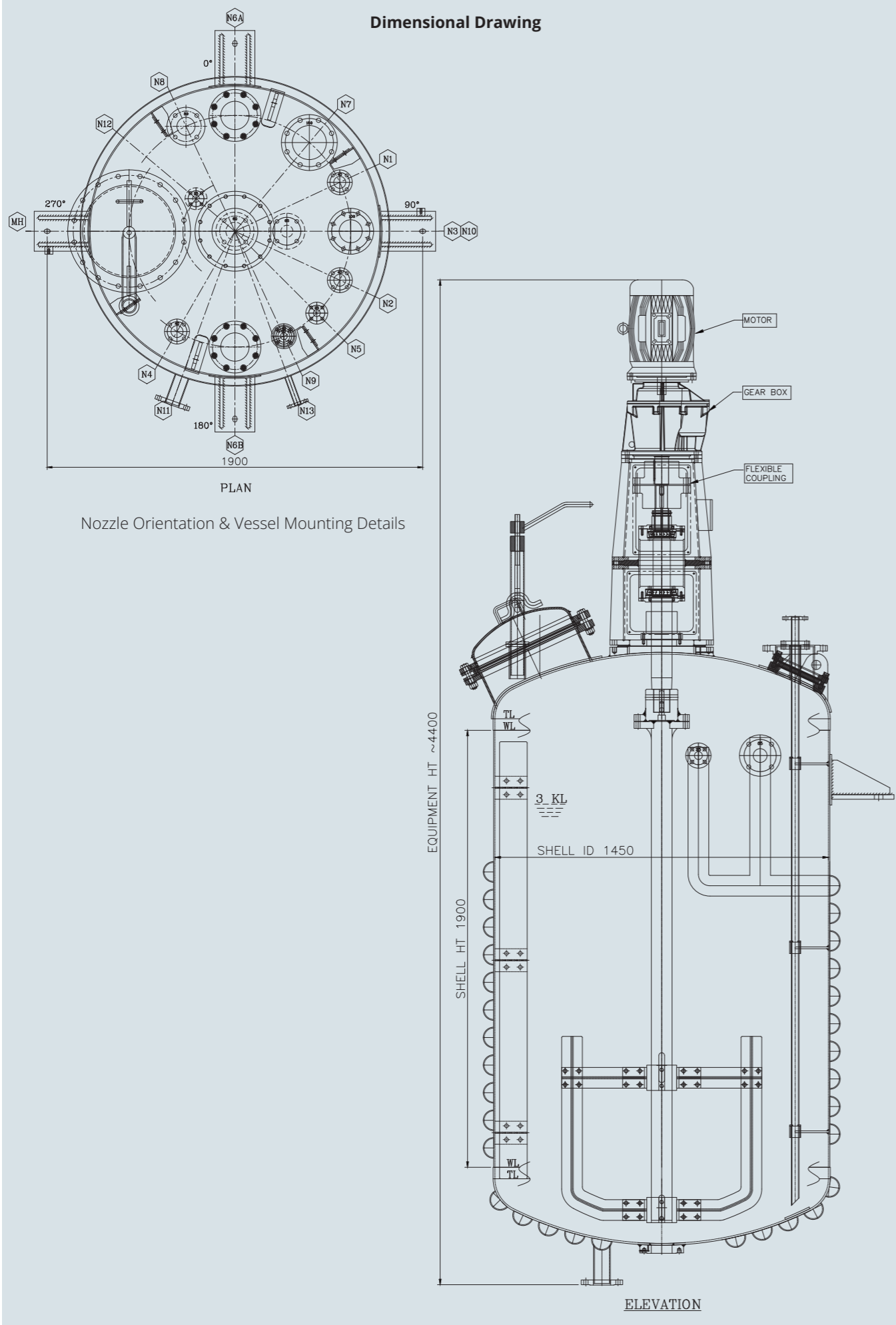
Facilitates chemical reactions by adding hydrogen (hydrogenation) to unsaturated compounds. Operates using catalysts under controlled pressure and temperature.

Stainless Steel Reactor

A specialized system designed for reactions requiring reduced-pressure environments. It operates under vacuum to lower boiling points, prevent oxidation, and ensure precise reaction control. Key applications include distillation, drying and polymerization processes.



Dimensional Drawing



Primary Dimensions of the Reactor

Description	Specification						
Design Pressure	FV TO 25 Kg/cm2g						
Design Temp	-200 to 350 Deg C						
Reactor Capacity	1 KL	3 KL	6 KL	10 KL	20 KL	40 KL	60 KL
Diameter (D) (mm)	1050	1500	1900	2250	2800	3500	4000
Shell Length (L) (mm) (TL to TL)	1250	1850	2300	2800	3600	4500	5200
Working Vol	1000L	3000L	6000L	10000L	20000L	40000L	60000L
Gross Volume	1300L	4000L	8000L	13500L	27000L	52700L	79400L
Dish Type	Tori / Elliptical	Tori / Elliptical	Tori / Elliptical	Tori / Elliptical	Tori / Elliptical	Tori / Elliptical	Tori / Elliptical
Limpet Size Half Coil	65 NB	80 NB	80 NB	80 NB	80 NB	80 NB	100
Nozzle Shell and limpet	As Per Required	As Per Required	As Per Required	As Per Required	As Per Required	As Per Required	As Per Required
Manway	400 ID	450 ID	450 ID	450 ID	500 ID	500 ID	600 ID
Flanges	SORF #150	SORF #150	SORF #150	SORF #150	SORF #150	SORF #150	SORF #150
Thermowell	25 NB	40 NB	50NB	50NB	50 NB	80 NB	80 NB
Sight Glass /Light Glass	100 mm	120 mm	120mm	150 mm	150mm	250mm	250 mm
Bottom Outlet	65 NB	80 NB	80 NB	80NB	100 NB	150 NB	200 NB
Support	4 Nos Lug	4 Nos Lug	4 Nos Lug	4 Nos Lug	4 Nos Lug	4 Nos Lug	4 Nos Lug
Drive	Motor with Gearbox	Motor with Gearbox	Motor with Gearbox	Motor with Gearbox	Motor with Gearbox	Motor with Gearbox	Motor with Gearbox
Seal type	Single/ Double	Single/ Double	Single/ Double	Single/ Double	Single/ Double	Single/ Double	Single/ Double
Agitator type	Anchor/PBT/ Hydrofoile	Anchor/PBT/ Hydrofoile	Anchor/PBT/ Hydrofoile	Anchor/PBT/ Hydrofoile	Anchor/PBT/ Hydrofoile	Anchor/PBT/ Hydrofoile	Anchor/PBT/ Hydrofoile

Note:

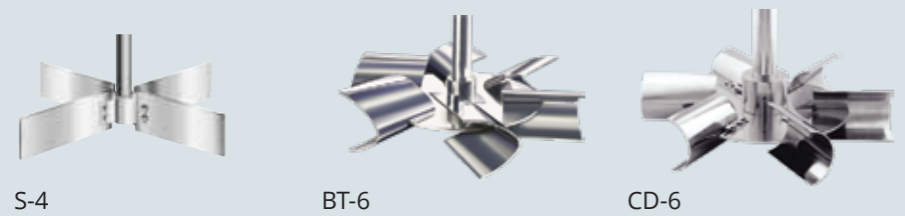
- Above mentioned technical data is for guidance only
- Modifacation provided upon requirement or confirmed by customer

Agitators & Impellers

Axial Flow Impellers



Radial Flow Impellers



High Viscosity Impellers



Performance Parameters:

- Speed Range: 10 - 500 RPM (variable speed options available)
- Power Rating: 0.5 kW to 50 kW depending on process requirements
- Torque Transmission: Designed for high-torque applications
- Type: Top-mounted, bottom-mounted, or side-mounted agitator

Bioreactors / Fermenter



Illuminating Bioprocessing with Precision, Performance, Purity & Engineering Excellence

Padmatech Industries delivers next-generation agitation systems and bioreactors engineered for maximum yield, uncompromising sterility, and unmatched process reliability. Our high-performance sterile impeller agitators-equipped with double acting mechanical seals, gas/liquid barrier options, and fully certified contact materials are designed to integrate seamlessly into every upstream and downstream operation. Each impeller is custom built to your specific shear, 0.2 dissolution flow and mass transfer requirements, ensuring exceptional performance in bacterial, fungal and mammalian cell systems.

Our advanced technology platforms span the full biologics development continuum-from early-stage concept to validated commercial manufacturing. With proven success across more than 40 biologics programs, including monoclonal antibodies, bispecific, fusion proteins, recombinant proteins, venom serum production, and microbial fermentation processes, Padmatech ensures seamless scalability and regulatory ready design.

Every Padmatech bioreactor is engineered to emulate the natural physiological environment required for optimal cell growth and product formation. Intelligent sensor architecture continuously regulates critical parameters such as pH, temperature, DO, and nutrient feed, enabling batch, fed-batch and continuous cultures with precision. Our bacterial fermenters maximize oxygen transfer and mass-transfer kinetics for robust microbial output, while our cell-culture bioreactors prioritize gentle, low-shear hydrodynamics to protect delicate mammalian cells.

Storage Tanks

Many industries handle various types of chemicals, powders, and liquids for their specific application areas, and based on their characteristics, they require different types of storage tanks to prevent chemical reactions with other contactable materials or substances. Industrial chemical storage tanks are thus used to store chemical substances. Padmatech Industries is a leading manufacturer of chemical storage tanks in India. These industrial tanks are designed, manufactured, and tested in-house at our state-of-the-art infrastructure based in Pune, Maharashtra. We are an ISO 9001:2015 certified company, and we work with minute attention to detail, from the configuration phase to the fabrication



phase, to result in impeccable quality Chemical Storage tanks. We are capable of manufacturing and supplying industrial storage tanks in various metals, including SS304, SS316, SS316L, exotic alloys, duplex 2205, SMO254, CS, CS+, Hastelloy C276, B2, B3, Monel 400, 904L, Alloy 20, rubber-lined, titanium, Hastelloy, nickel, etc.



Quenching Tank

Quenching is the rapid cooling of a workpiece in water, oil, or air to strengthen and harden materials like steel and other iron-based alloys. Padmatech Industries has years of experience in designing and manufacturing custom quench tanks based on process requirements, charge size, and weight. We use standard materials to ensure a smooth quenching heat-treatment process. Quenching tanks from Padmatech Industries provide advanced cooling solutions required to achieve the desired mechanical properties of heat-treated metals. Thanks to its robust structure, precise cooling mechanism, and energy-efficient design, our quenching tank ensures reliable performance in various industrial applications. By choosing Padmatech Industries, companies can

improve their heat treatment processes, improve product quality, and support sustainable production methods. Our quenching tank is designed with energy efficiency in mind.

Advanced insulation materials and efficient cooling systems reduce energy consumption, lower operating costs, and maintain high cooling efficiency.



Enhance the heat transfer by upto 2X

Our team of highly qualified engineers specializes in distillation column design, offering expertise in process design simulation, hydraulic design calculations, instrumentation, and automation to ensure optimal performance and efficiency.

Heat Exchangers / Condenser

Heat exchangers, are essential for transferring heat between fluids without mixing them. These components, made of tubes, plates, or coils, are designed to maximize surface area for efficient thermal transfer. Modern systems achieve up to 95% thermal efficiency with optimized surfaces, while the typical temperature range spans from -200°C to 400°C, with custom models available for extreme conditions. They can handle pressures ranging from 5 bar to 150 bar, depending on the specific design.

The heat exchanger can be designed for counter-current, concurrent, or crossflow arrangements to enhance heat transfer efficiency. With highly customizable surface area options, it can achieve up to 5000 m² per unit, ensuring optimal heat transfer. This design offers a key feature of triple the heat transfer efficiency.



Nutsche Filters

Nutsche Filters offer high filtration rates with automated discharge for efficient processing. Their vacuum-assisted filtration system reduces power consumption, ensuring energy efficiency. Designed with a fully enclosed structure, these filters comply with GMP standards, ensuring quality & reliability in every operation.

Distillation Columns

We are a leading manufacturer and supplier of distillation columns, offering complete turnkey solutions for distillation systems, including batch, continuous, azeotropic, extractive distillation, and fractionation. Our columns are available in both packed and tray types, with diameters up to 3.0 meters.

Oil Separator/Absorber Tower

A specialized unit designed to separate oil from process streams or absorb unwanted gases, commonly used in petroleum refining, chemical processing, and wastewater treatment.

▶ Fluid Mixing Technology

High-Speed Mixer

It's an efficient solution for rapid blending and dispersing of materials. Operating at high rotational speeds, it generates intense shear forces for fine mixing. Commonly used in food, pharmaceuticals and chemicals, it excels at emulsifying, homogenizing, and dispersing. Precision balancing and durable materials ensure the mixer can withstand high-speed stress, providing reliable performance and long-term durability.

Planetary Mixer

It is a versatile mixing equipment with rotating blades that move around both the vessel's center and their own axis.

This motion ensures thorough blending, particularly for viscous materials. Commonly used in the food and pharmaceutical industries.

Twin-Shaft Mixer

The Twin-Shaft Mixer features two parallel shafts with paddles or blades, designed for intensive mixing. It works by creating a turbulent zone between the shafts, ensuring efficient mixing of solids, liquids, or slurries. Widely used in industries such as concrete, construction materials, and powder processing.



▶ Blenders & Dryer



Padmatech's blenders are engineered for optimal mixing efficiency and durability across various industries.

Ribbon Blenders feature dual helical ribbons that facilitate thorough blending of dry powders and granular materials, offering uniform distribution with minimal energy consumption.

▶ Powder Granulation Equipment



Granulation Equipment is used for particle size enlargement, ensuring uniformity in pharmaceutical and industrial applications.

Roll Compactors

Dry granulation equipment that compresses powders between two counter-rotating rolls to form dense sheets or ribbons. Operating pressures range from 1 to 10 tons/cm².

Granulators

Used for wet or dry granulation to produce uniform granules. Types include high-shear granulators (for rapid mixing and granulation) and fluid bed granulators (for drying and granulation in a single step).

Vibro Sifters

Vibratory or centrifugal machines that separate granules by size. Mesh sizes range from 10 to 500 mesh, ensuring accurate particle classification and uniformity.

These systems ensure optimal flow properties, compressibility, and product consistency.

Blenders ensure homogeneous mixing by utilizing a rotating screw within a conical vessel, minimizing shear and ideal for delicate materials.

Double Cone Blenders provide gentle yet effective mixing, using a rotating dual-conical vessel to ensure consistent results without material degradation, making them perfect for blending bulk solids and powders with ease. All blenders are constructed from high-quality, corrosion-resistant materials, ensuring long-lasting performance.



Air Tray Dryers operate at atmospheric pressure with temperatures up to 200°C, suitable for batch drying of granular or crystalline materials.

Vacuum Tray Dryers (VTD) function under vacuum conditions (up to -750 mmHg) and temperatures between 30°C to 150°C, ideal for thermolabile substances, ensuring low-temp drying with minimal oxidation.



These dryers ensure efficient moisture removal, consistent drying rates, and product integrity across various industrial applications.



▶ Nauta Dryer

Padmatech industries, an ISO 9001-2015, PED, CE, and ASME U-Stamp certified company, offers high performance Nauta Dryers engineered for superior mixing and efficient drying. Designed with a conical vessel and rotating screw for gentle, uniform processing, these dryers achieve powder moisture levels as low as 0.4%. Available with steam, thermic fluid, or hot water heating systems, the units feature limpet and jacket options for options heat transfer, full insulation with rockwool for energy efficiency, and a heavy-duty design with precision bevel gearing. With over 20 years of experience, in house fabrication, and 24x7 technical support, Padmatech delivers customized, eco-friendly solutions trusted by leading pharmaceutical and chemical companies worldwide. Padmatech



Nauta Dryers is with full vacuum design can be process heat Sensitive material in Food Pharma & Biotech application and Similar application and industry. Padmatech Industries Nauta Dryers is with full vacuum design can be process heat Sensitive material in Food Pharma & Biotech application and Similar application and industry.

▶ Brewery & Winery Plant

Brewery and Winery Plants feature specialized equipment for fermentation, filtration, and packaging. Breweries use mash tuns, lauter tuns, fermenters (500-10,000 liters), and conditioning tanks at temperatures between 10°C to 25°C. Wineries employ crushers, destemmers, fermenters, and oak barrels or stainless-steel tanks at 10°C to 30°C. Both rely on pumps, heat exchangers, and CIP systems to maintain hygiene, ensuring efficient production & product consistency.



▶ MEE Plant/ZLDS Plant



- MEE (Multiple Effect Evaporation) and ZLDS (Zero Liquid Discharge System) Plants are designed for wastewater concentration and complete water recovery.
- MEE Plants use multiple stages of evaporation to concentrate effluents, achieving high energy efficiency by reusing steam in successive effects. Operating temperatures range from 50°C to 120°C, with vacuum conditions (up to -700 mmHg) to reduce boiling points.
- ZLDS Plants integrate MEE, crystallizers, and dryers to achieve zero discharge by evaporating water and converting residues into solid waste. These systems handle high TDS (Total Dissolved Solids) and COD (Chemical Oxygen Demand), ensuring environmental compliance and water recovery efficiency up to 95-99%.

▶ SILO'S

Padmatech silos are engineered according to ASME Section VIII, DIV I performance under all loading scenarios, including eccentric discharge, vibration and over -pressurization ensuring safe cyclic filling. We design each unit based on material specific parameters bulk density (ρ), friction angle (θ), wall friction coefficient (μ), consolidation pressure, and flow factor (ff) angle of repose to ensure

correct prediction of vertical and lateral loads. All hoppers follow Jenike's mass flow principles, with optimized half angles and smooth transitions to eliminate bridging, ratholing, and flow interruptions. Advanced pressure modelling (Janssen, Walker, Eurocode methods) ensures accurate calculation of wall thickness, buckling resistance, and reinforcement needs for both steel and concrete configurations.

We provide solutions for abrasive, cohesive, hygroscopic, and fine powder materials, with optional wear liners, aeration, vibration systems, and dust-control features. Designed for storage capacities from 0.5KL TO 500 KL, our systems deliver long-term reliability. reduced maintenance, and safe operation even under uneven filling or extreme conditions. (Register under EIL for SILO manufacturer under process)





Our Certificates



Turnkey Plant Solutions

At Padmatech Industries, turnkey projects are our cornerstone, covering design, engineering, and execution of fully integrated systems to ensure seamless delivery from concept to completion. Our expertise guarantees that each plant is tailored to meet your operational needs while upholding the highest standards of efficiency, quality, and sustainability.

Our Turnkey Services Include:

- Skid Mounted Plants
- Custom Design & Engineering
- Mechanical Equipment, Process design & Manufacturing.
- Plant layout.
- Spool Piping Design And Layout
- Erection and commissioning
- Mass & Energy balance
- Procurement & Installation:
- Commissioning & Testing:
- Project Management.
- Maintenance & Support
- Conceptual design
- Laser Cutting Service



Scope of the welding activities

Only valid in relation and as an attachment to the certificate DIN EN ISO 3834 Part 2

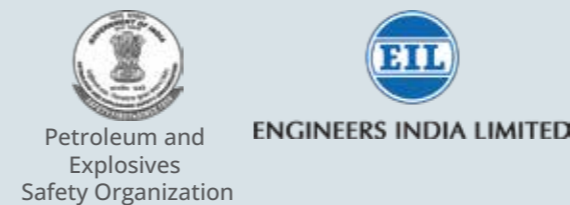
Manufacturer: PADMATECH INDUSTRIES PVT. LTD
Unit II Plot No. 239 A, Sector 07, PCNTDA, MIDC, Bhosari, Pune - 411 026, Maharashtra, India
Cert.no.: 07204/1326/HS/4912/26 R2
Date of issue: 20.01.2026

1. Product(s) of the manufacturer
In the following depending on possibly further required certifications:
Manufacture of Pressure Vessels, Piping, Heat Exchangers, Conveyor system, Food processing equipment and its parts, and other welded components.
2. Product standards and other standards (see DIN EN ISO 3834-2)
3. Material groups (acc. to CEN ISO/TR 15088)
1.1Ru < 275 MPa, B.1
4. Welding processes and related material groups
Welding processes (acc. to ISO 4063) | Material groups (acc. to CEN ISO/TR 15088)
141 TIG Tungsten inert gas welding, manual | 1.1Ru < 275 MPa, B.1
5. Responsible welding coordinators

Name	Qualification	Scope of competence and level
Mr. Satish D. Keshar	TIG	Responsible welding coordinator B
Mr. Anand Kamble	---	Support welding coordinator
Mr. Raj Kumar Ghuge	---	Support welding coordinator

* The level of knowledge complies with ISO 14731 B, 5 or C

Certificates in Process



Our Awards



Best Quality Product Manufacturing Company of the year 2021 by Summerntor Pro powered by MSMS-India



Certificate of Recognition From E+H



Special Effort Award in the years 2020 and 2021

Our Team

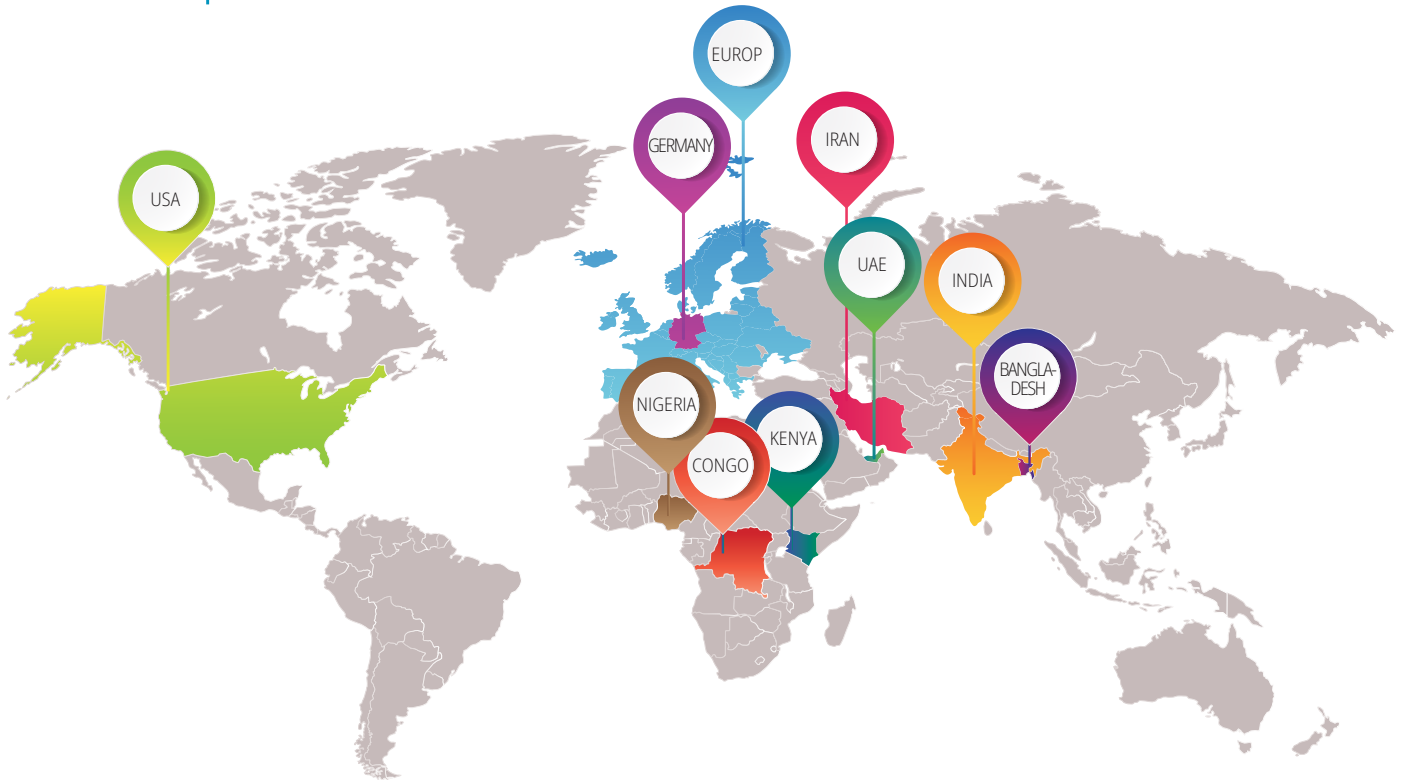


Our Clients

Our Brand Promise
98%
UP TIME

API & Pharma Industries	
Automobile Industry	
Biotech Industry	
Chemical Industries	
Component Business	
EPC Company	
Foundry Chemical Industry	
Government	
Ink Industry	
Textile Industry	
Winery & Brewery Industry	

Our Export



PADMATECH
INDUSTRIES PVT LTD

Plant 1

Plot No. 219, Sector 10, PCNTDA MIDC,
Bhosari, Pune 411026

Plant 2

Plot No. 239A, Sector 7, PCNTDA MIDC,
Bhosari, Pune 411026



Plant 3

Plot No. A-10, Newasa Industrial Area,
Village, Shingve Tukai,
Dist. Ahilyanagar 414607,
Maharashtra, India.

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