

Efficient, Reliable and Sustainable Drying and Evaporation Solutions

Spray Dryers | Spray Coolers | Multi-Effect Evaporators | Self-Cleaning Evaporator
Zero Liquid Discharge Plants | Integrated Fluid Bed Dryers | Pilot Plants



Passion » Powered » Performance



350+ PROJECTS | 225+ CLIENTS | 10+ COUNTRIES

Applications

- > Dyes
- > Acid dyes
- > Reactive Dyes
- > Disperse Dyes
- > Dye Intermediates
- > Metal Complex Dyes
- > Hydrogenated Castor Oil
- > Stearic acid
- > Palm Stearin
- > Fatty Acid
- > Dispersing Agent
- > Tanning agent
- > Pigments
- > Pharmaceuticals
- > Sodium Propionate
- > Spirulina
- > Herbal/Medicinal Plant Extracts
- > Agro Chemical
- > Vitamin B-12
- > Phosphates
- > Enzymes
- > Urea Formaldehyde Resin & Phenol Resin
- > MCCP
- > Calcium Chloride
- > Flavors, Fragrances
- > Instant Tea and Coffee
- > Ceramic for tiles
- > Fruit Juices
- > Technical Ceramics
- > Milk Powder
- > Composite Minerals
- > Banana Puree
- > Effluents



What sets us apart?

With a strong foundation of the chemical processes coupled with an ability to understand your requirements, Shachi delivers the best and next in technology for the process. Each product reflects thinking of future of performance and aims to deliver it today.

Proven Performance

Shachi's Process Equipment and Plants have delivered proven performance in 120+ applications across 10+ diverse industries.

Proactive Approach

From identifying challenges before you face them to building and delivering solutions that are geared to meet your future needs, Shachi's proactive approach is evident in every task.

End-to-end Capabilities

Concept to final commissioning and beyond, you can rely on Shachi's expert team to gauge and successfully solve the foreseen & unforeseen challenges at every step in your processes.

Appropriate Technology

Shachi's expert team studies your process requirement to every possible detail & suggests a solution that is most appropriate in terms capability, capacity and costs. That's our mantra for appropriate technology.

A photograph of two men in a factory setting. The man on the left is wearing a white hard hat with a logo, a white dress shirt, a dark tie, and dark trousers. He is holding a silver laptop. The man on the right is wearing a grey hard hat, glasses, a white dress shirt, and dark trousers. He is pointing at the laptop screen. The background shows industrial machinery and a clean, well-lit factory floor. The entire image has a blue color cast.

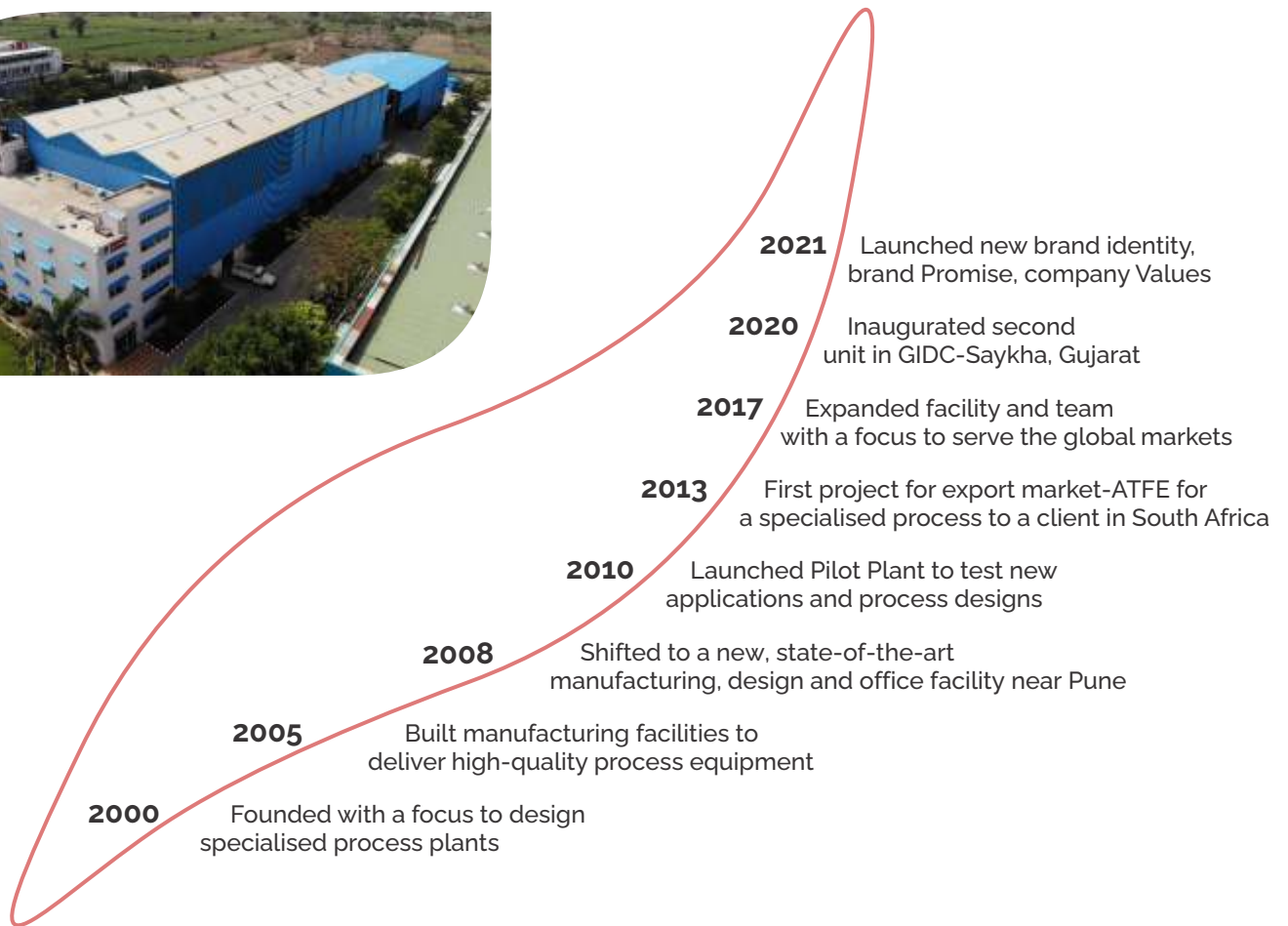
Your

Partners

Several leading manufacturers from India and around the globe rely on Shachi's capabilities to develop innovative solutions and ensure cost-effective delivery. Shachi's team has successfully developed complete process plants, for some of the most complex and large-scale operations, in record time.




Journey



Corporate Overview

- > Promoted by Technocrats with hands on experience
- > Over 350 Process Plants operational in 10+ Countries
- > Team of 100+ includes designers, engineers, service support and technicians
- > Workshop spanning over 1,60,000 sq. ft. with full-fledged fabrication facility
- > In-house R&D team to develop and design innovative products
- > Pilot Plant facility to prove the process and develop new products
- > Dedicated team for erection, commissioning and after sales service



Future of Technology

With a strong know-how of the chemical processes, coupled with an ability to precisely understand your requirements, Shachi delivers the next in technology for your production. Each product reflects thinking of future of performance and aims to deliver it today.



Leadership

Shachi's team is a perfect blend of industry veterans in guiding role & an experienced team of young functional leaders to deliver the future of technology.



Marthu is a Mechanical Engineer with 30 years of expertise in design to commissioning of a variety of process equipment and applications. Clients trust and value him for sharp, practical advise on conceptualizing the right process technology to maximize business benefits. His practical suggestions at design, engineering and commissioning have helped the Clients to save \$ millions in operational costs. At Shachi, he leads the strategy and business development.

Marthu Shanbhag - Managing Director




Suruchi comes with two decades of experience in process design, commercials and project management in the process industry. She is the sounding board for the team at Shachi on all matters from the future of technology to solving on-site challenges. An avid learner, Suruchi has taken up advanced management programs at the prestigious IIM Ahmedabad, IIM Kolkata and the Wharton School of Management.

Suruchi Shanbhag - CEO



Arun comes with a vast experience in design, development, and operations of critical and highly complex processes in his previous role at the Department of Atomic Energy, GACL etc. At Shachi, he is valued for deep process expertise to ensure exceptional results for the customers. His inputs have been instrumental in creating innovative designs for critical processes that consistently outperform customer's expectations.

Arun Mandke - Executive Director



Future of Manufacturing

Shachi has developed a highly optimised manufacturing facility for on-time delivery. The facility is well-equipped to manufacture & test large-scale, complex process plants for a variety of applications. Located strategically, the facility has been serving customers in India and countries around the world.

Quality

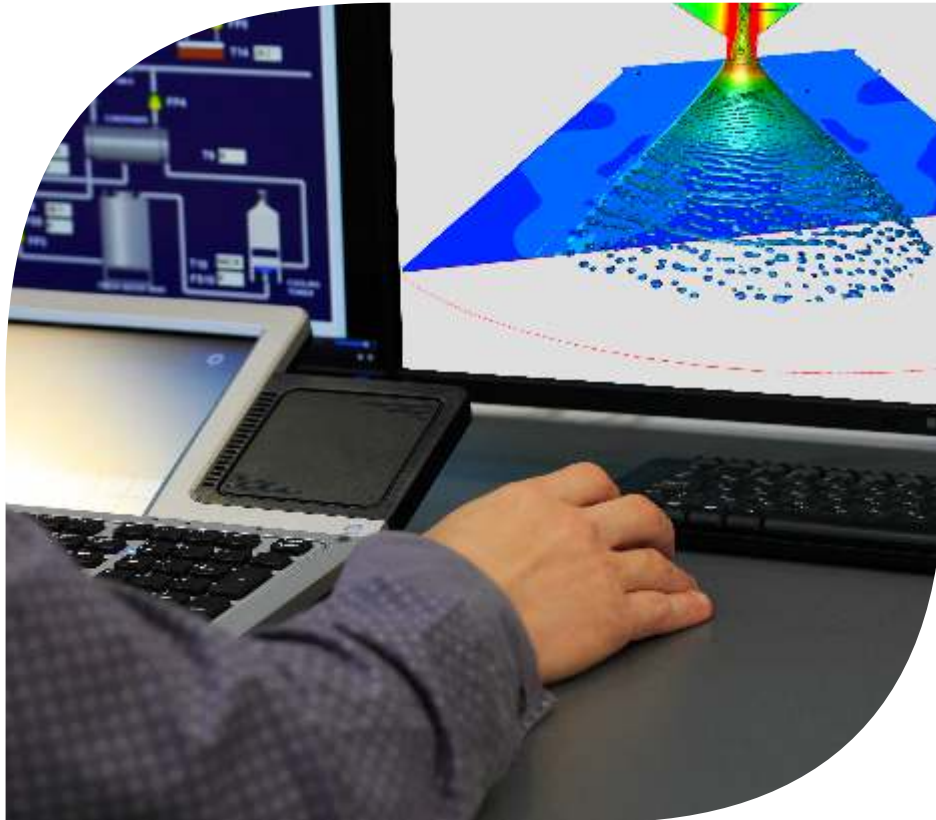
- > Manufacturing with various International Standards like ASME, TEMA, DIN, BS, IS
- > The facility can handle various metals like Stainless Steel 304/316, 321, 904L, Duplex Steel, Hastelloy, Titanium and higher alloys
- > Open for inspection from various external third party agencies like Lloyds, Bureau VERITAS etc.

Production

- > State-of-the-art manufacturing facility spread over 60,000 sq. ft. covered Manufacturing Facility & 80,000 sq. ft. of open space
- > Manufacturing facility is equipped with latest machines required to engineer large scale plants



Proven, Innovative Process Designs



Shachi's Innovative designs, provide an edge to the customers in terms of cost-effective operations, performance, and maintenance.

- > Infrastructure and documentation that meets global standards
- > Design team with over 100+ man years of combined experience
- > Advanced simulation and analysis using CFD
- > Pilot plant to accelerate development and testing of new processes
- > Expertise to design fully automated plants with advanced controls

A blue-tinted photograph of two technicians wearing white hard hats and dark work clothes. They are leaning over a control panel or server rack, looking at a laptop screen. The scene is set in an industrial or laboratory environment.

Advanced Service support

Prompt, expert service is vital to ensuring consistent high-performance for your process equipment and plant. Shachi's team goes beyond just solving problems, and offers support to get the best performance from the process equipment and plant.

- Dedicated teams for installation, commissioning and maintenance
- Full-time back-end support for quick calculations, fine-tuning of the equipment or plant



Service Support

Global Support

Shachi has a dedicated team of Service Engineers with proficiency to service and maintain process equipment and plants across the world. The team is based in Pune, India.

Remote Diagnostics

Shachi offers remote diagnostics service to minimize downtime and perform modifications. This service allows Shachi's experts to remotely access the process equipment or plant for real-time troubleshooting and support, facilitating speedy fault analysis and resolution.

Plant Reviews & Training

Post-warranty, Shachi's team can conduct routine review studies to monitor the equipment/plant performance in real time. Based on the process and production data, Shachi's team offers expert advice & training to further improve the performance of your process plant. The team also provides guidance on how to improve productivity, reduce energy use and enable best practices in manufacturing and maintenance.

AMCs

Shachi offer Annual Maintenance Contracts. services include routine, preventive maintenance procedures, checks for safety, reliability of the plant and process configurations to improve the efficiency and product quality. The team works closely with your production staff to understand any problems that they face in the process and suggests practical solutions.

Product Range



Spray Dryers

Shachi's Spray Dryers are recognised for being completely free from the deposit of materials on the walls of during its operation, thus giving metallic clean chamber.

This ensures a significantly lower maintenance effort, output as per the design and quality product with desired properties. The Spray Dryer designs are very easy to clean and create further ease in operation and maintenance.



Spray Coolers

Spray Cooler designs from Shachi deliver output of up to 20 i.v.. The Spray Coolers are designed to produce an accurate size for granular production, enabled by innovative nozzle designs. Shachi manufactures open and closed loop spray coolers with high energy efficiency.



Multi-effect Evaporators

The self-cleaning evaporators is an industry-leading innovation offered by Shachi, in collaboration with Klaren, Netherlands.

These evaporators do not require any jet cleaning arrangement thereby bringing huge savings on costs, time and maintenance efforts. Shachi's evaporators have proven performance in a variety of applications including the highly demanding one's such as effluent treatment.



Benefits

- > Energy efficient equipment and plants
- > Emission levels below pollution norms
- > Easy to clean and maintain
- > Robust construction and long operating life
- > Low-maintenance equipment or plants
- > Guaranteed output, with consistent product properties
- > Modular designs which are easy to scale-up, if required

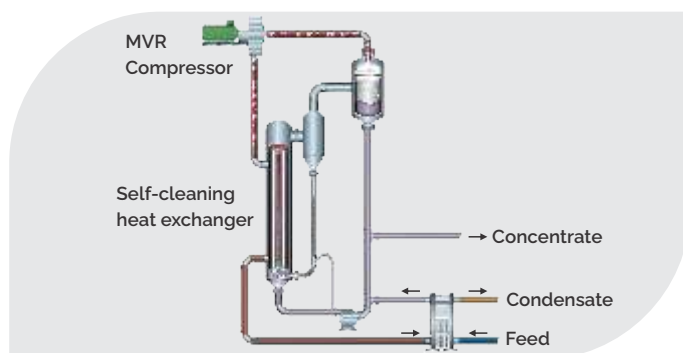
Zero Liquid Discharge Plants

With deep expertise and proven designs for Spray Dryers and Evaporators, Shachi offers a one-stop-solution for ZLD Plants. Shachi's ZLD plants deliver 100% recycle of condensate and has proved its performance for difficult to process effluents.



MVR with KLAREN Self-cleaning Evaporator

Mechanical vapor recompression (MVR) technology in evaporator plant consumes less energy as compared to conventional evaporator. Hence it reduces overall plant operating cost. In the conventional evaporator, most of the energy in the form of steam generated is either lost or partially utilized. In mechanical vapor recompression process, entire steam is compressed using mechanical pump at higher pressure which creates high heat energy to be used for further evaporation.



Integrated Fluid Bed Dryers

Proven for global production standards, Shachi's Integrated Fluid Bed Dryers come with several inherent core strengths that include high yield and energy efficiency and one of the lowest operating costs in the industry.



Pilot Plants

With a compact design and fully automated controls, Shachi's Pilot Plants come offer superior aesthetics and finish. Suitable for continuous operation, the pilot plants have also been converted into relatively smaller capacity commercial plants, in several instances.

The Pilot plants provide you with high level of flexibility to try, test and analyse variety of processes.



Key Installations



Spray Dryer for MCCP

Shachi's Spray Dryers at a leading API manufacturers helps to effectively process highly sensitive product and achieve the desired quality and production goals.





35 Plants, One Client

India's largest manufacturer of speciality and general purpose dyes relies on Shachi's Spray Dryers for guaranteed quality, for over 90% of its production. The two decade long association has seen the relationship grow from strength to strength driven by the highly reliable performance of Shachi's equipment. The high capacity Spray Dryers are a benchmark in the industry and are specially appreciated for their metallic clean, deposit-free production.



ZLD for Dye Plant

The Client, a market leader, turned to Shachi to ensure a total compliance for pollution norms for its large dye manufacturing facility. Shachi provided an end-to-end solution with design, development and commissioning of all the equipment for ZLD under single roof. The results have been phenomenal. While the effluents are treated effectively, the operation of the plant has been highly optimal as compared to the industry norms.

Spray Cooler

Spray Cooler with 3 TPH capacity for producing palm stearin for a leading manufacturer and exporter based in western India.





Safe operations for fragrance manufacturing

Fragrance manufacturing involves handling & processing of highly explosive chemicals and thus requires very high standards of safety. Shachi conceptualised, designed and delivered a fully automatic plant with highest safety including advanced alerts/alarms, explosion proof suppression systems and more to ensure safe operations and peace-of-mind for the Client.

Integrated Fluid Bed Dryer for an export focused agro-chemical

The Client approached Shachi with a very specific demand which was to be launched in the global market. Shachi's IFBD delivered on the requirements, precisely and the product met all the global norms set by various regulatory agencies.



Shachi's strategic technology collaboration with Klaren International, Netherland

Shachi's strategic technology collaboration with a Klaren International, Netherland helps to bring innovative, self-cleaning systems in evaporators for customers in the Indian market. These Evaporators do not require jet cleaning, thus saving time, reducing costs and maintenance while ensuring seamless production.



Advantages



Better energy performance

As the tubes of the evaporator remain clean and thus provide constant heat transfer.



Environment Friendly

The System does not use chemicals or online additives for cleaning and therefore achieves cleaning with no hazardous waste streams.



Enhanced productivity

Since the equipment does not require to be taken out of production for cleaning, the capacity of the Evaporator remains constant leading to a significantly improved productivity for the entire plant.



Compact Design

Constant heat transfer in self-cleaning evaporators allows tighter allowances in design. By eliminating the need for over dimensioning the systems designed are highly compact.



AM Atomizers is a company of experts in rotating machines and process plant engineering with decades of experience. They have participated in numerous international projects relating to the use of significant atomizers in the food, chemical, and environmental sectors since their inception in 2018.

In 2022, AM Atomizers Technology joined forces with Shachi Engineering Pvt. Ltd. to develop, sell, and supply rotary atomizers and related services such as installation, commissioning, startup, maintenance, spare parts, retrofitting, refurbishing, and more.

Key Clients

- > Adani Wilmar Ltd.
- > Bosch Ltd.
- > Jindal Stainless Ltd.
- > L&T Hydrocarbon Engineering Ltd.
- > Hindustan Petroleum
- > Thermax Ltd.
- > The Himalaya Drug Co.
- > Gujrat Alkalies and Chemicals Ltd.
- > Alliance World Group
- > Dr. Reddy's Laboratory
- > Colourtex Industries Pvt. Ltd.
- > Jay Chemical Industries Ltd.
- > BASF
- > Zest Aromas Pvt. Ltd.
- > Heavy Water Board
- > Ankit Pulps and Boards Ltd.
- > Warkem Biotech Pvt. Ltd.
- > Gujarat Fluorochemicals Ltd.
- > Accent Microcell Pvt. Ltd.
- > Spectrum Dyes & Chemicals Pvt. Ltd.
- > United Phosphorous Ltd.
- > Huber Group
- > Grauer & Weil (India) Ltd.
- > Valens Molecules Pvt. Ltd.
- > NB Entrepreneurs
- > ASHA Cellulose (I) Pvt. Ltd.
- > Kiri Industries Ltd.
- > ANA Oleo Pvt. Ltd.
- > Advanced Enzyme Tech
- > Porus Laboratories(P) Ltd.
- > Evyap Sabun Malaysia
- > Aarti Industries Ltd.
- > EFKO Russia
- > Vanita Agrochem (I) Pvt. Ltd.

Connect



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