"Your partner for a BETTER today and an EFFICIENT tomorrow"







### ABOUT US

IPEC Engineering Pvt. Ltd, formerly known as Prakash Engineering Works, was established in the year 2006 by Mr. Jay Prakash Yadav who has worked closely with Chemical, Pharmaceutical and Cosmetic industries across the country to set up process equipments, packaging machines and equipments and delivery turnkey projects. With a rich repertoire of over 25 years in manufacturing, we have developed a comprehensive range of machines that complement the needs of the Chemical, Pharmaceutical and Cosmetic companies, enabling IPEC to grow into an efficient partner to all these industries sectors.

IPEC initiated its manufacturing from a modern facility spread over 22,000 sq ft situated on Plot no. 5175 in Ankleshwar GIDC - Gujarat, INDIA. The company has concretized its plans to expand its manufacturing capabilities by acquiring an additional state of the art unit sprawling over 22,000 sq ft. This unit will commence its operations from plot no. D-3/E/46/8 based in Dahej III GIDC - Gujarat, INDIA, and 19000 sq. ft. will be commencing soon at plot no. 5123, GIDC-Ankleshwar, Gujarat, INDIA.



Our mission is to supply high quality products to the domestic and global market on time, delivering value to our clients.



#### VISION

Our vision is to become a world class engineering company by adhering to the best quality practices and implementing the principles of "Quality Management".



### **OUR CORE STRENGTHS**

IPEC Engineering Pvt. Ltd. is a dynamic organization with a proven track record since its inception. Our team consists of more than fifty skilled craftsmen and a team of highly qualified, experienced engineers and technicians, who have noteworthy achievements in the respective domains. A team of professionals, possessing in-depth knowledge of domestic and international norms and global business ethics lead our teams from the front. They have strong understanding of different international cultures which enables us to serve our international clients with much ease.

















#### **OUR ASPIRATIONS**

Our impeccable track record to deliver quality products and services on time and our presence in the market has enabled us to establish and maintain sound business contacts worldwide. These business relationships assist us to diversify and develop markets for new products continuously. Our name is associated with some distinct qualities such as accuracy, quality, on-time delivery and finishing – attributes that we have diligently developed and fiercely followed all these years. These attributes make us most sought solution provider in the industry. Statistical process control from our company guarantees total control with the added benefit of fast and efficient setup.

### PRODUCTS AND SERVICES

The Comprehensive range of IPEC Engineering Pvt. Ltd. Products includes complete Granulation, Coating, Oral liquid, Ointment, Injectable, Soft & Hard Gelatin, API, Food, Dairy & Chemicals, Manufacturing Processes Equipment.



We offer "turn-key projects" & "single window to solve various projection problems".

It means from actual point of conceptualization to execution of the up and running plant, we are completely involved at every stage of development and delivery of the project. We specialize in concept of delivering the following turnkey projects:

- Tablet Manufacturing Plant
- Liquid Manufacturing Plant
- Ointment Manufacturing Plant
- Anticancer Project
- Injection Plant
- Chocolate Manufacturing Plant
- Perfume Manufacturing Plant
- Hard Gelatin Capsule Turnkey Project
- Soft Gelatin Capsule Turnkey Project
- Purification Turnkey Project

#### OTHER SERVICES

Apart from the core manufacturing of plant's and machines required by the Chemical, Pharma and Cosmetics industries, IPEC also offers additional services that many of our esteemed clients can use for customization of their needs like;

- Utility management services
- Design services
- Installation & commissioning services
- Validation & Documentation services
- After Sales Services
- Repair & Maintenance Services
- Engineering consultancy service







We also manufacture machineries according to customer specification. The pro-active management and continuous product innovation practices that we follow have enabled us to earn the goodwill and maintain our credit worthiness among our customers.















#### Vibro Sifter

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Effective in separation of mass composition of solids, liquid from solid and also gradation of materials as per particle size.
- Specially designed motor carefully positioned at the centre of the base plate to provide tangential thrust.
- Double and triple deck unit with different screens can be provided.
- Noiseless and maintenance free unit.
- Optimum use of space and low power consumption.
- Available in Size 12" 18" 24" 30" 36" 48" & 60 Inch.

#### Paste Kettle

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Hemispherical design for proper mixing of paste.
- Discharge from bottom via butterfly valve.
- Driven via motor & gear box assembly mounted on top.
- Anchor type impeller design for proper mixing of paste.
- Hydraulic lifting with tilting arrangement.
- Serves an effective purpose in heating of Paste,
   Pulp, juice of fruits and vegetables to the desired temperature.
- Available in batch capacities ranging from 50 Kgs to 1,000 Kgs, as per client's requirements.
  - All our machinemes/equipments are designed, engineered and manufactured with mich adherence to CGMP code.
- All control parts are mode of groups ATSLSS 304/316/3161 pands







### Rapid Mixer Granulator

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- High quality precision machines suitable for fast efficient and uniform mixing of raw materials/ingredients in the same container.
- Less wetting and more rapid drying.
- Mix the dry components first, followed by wet granulation, without transferring the dry mixture.
- Reduces mechanical drudgery and only one operator is needed to operate machinery, thus more user friendly.
- Modern PLC with manual operating system.
- Impeller lifting arrangement available if required.
- Available in batch capacities ranging from 50 Kgs to 1,000 Kgs, as per client's requirements, depend on Bulk Density.

#### Mechanical Loader

- Ideal for loading materials into sifter, RMG, tablet compressors etc.
- Hydraulic/electromechanical lifting arrangement.
- Can be integrated to downstream/upstream units.
- Swivelling movement of the lifting arm is facilitated.
- cGMP compliant with manual operations.
- Lift height 1,000 mm to 4,000 mm.
- Available in lifting capacities ranging from 50 Kgs to 1,000 Kgs.
- All our machineries/equipments are designed, engineered and immulactured with strict adherence to CGMP code.
- All correct path are made of penuine ATSI 55 304/316/3161 grade.



# Fluid Bed Dryer

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Superior over conventional methods of drying moist products.
- The product to be dried is fluidized by passing jets of hot gases through it, ensuring uniform transfer of heat energy from the gas stream to the moisture laden product, achieving uniform drying.
- Highly customizable with optional packages, suiting varied requirements of the clients.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 5 Kgs to 500 Kgs, as per client's requirements, depend on Bulk Density.



### Tipper

- Hydraulically operated with an arm to lift and tilt/ rotate FBD bowl by 180°.
- Easy to clamp with FBD bowl.
- Easy to operate and clean.
- Eliminates tedious and unhygienic manual handling of products.
- Operation is completely dust free and eliminates scooping.
- Can be provided with pneumatic actuator.
- Can be integrated to downstream/upstream units.
- Swivelling movement of the lifting arm is facilitated.
- cGMP compliant with manual operations.
- Lift height 1,000 mm to 4,000 mm.
- Available in lifting capacities ranging from 50 Kgs to 500 Kgs.
- All our mechineries againments are designed, segmeeted and monufactured with strict adherence to cGMP rade.

  All contact parts are made of genuine ATSLSS 304/316/3164 grade.







- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Ideal equipment for the granulation of Pharmaceutical material.
- Precision designed to grind /compress/impact and shear in an effective manner.
- Most suitable for Granulating, Pulverizing, Mixing, Shredding and Kneading of a range of wet and dry material.
- Low energy consumption and high degree operation.
- Facilitates automation capability and dust free product transfer. Helps to reduce containment and cross contamination. Provided with butterfly valve for discharge.
- Available in batch capacities ranging from 50 Kgs to 500 Kgs. as per particle size.



#### IPC Bin

The IPC Bins loaders are used for the transfer of materials in a dust free manner without human touch in pharmaceutical industries for load powder into RMG bowls etc.

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Minimizes the overall amount of handling of materials that occurs in manufacturing and other such processes.
- Facilitates automation capability and dust free product transfer. Helps to control containment and cross contamination.
   Provided with butterfly valve for discharge.
- Available in different capacities ranging from 25 Litres to 1,500 Litres.
- All our machineries/equipments are designed, angineered and many first year with more adherenced to ACAM code.
- All contact parts are made of genuine ATSLSS 304/3 L6/3 L6.

# **BLENDERS**





### Cage Blender

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Mainly used for blending of dry powders for tablet production and capsule, facilitating better flow for tablets and capsules.
- Totally dust free operation and adaptable to handle more than one container.
- Equipped with advanced control systems.
- Safe operation of unit ensured.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 50 Kgs to 1,500 Kgs, as per client's requirements, depend on Bulk Density.

#### V Blender

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Efficient and versatile machinery for mixing and lubrication of dry powders homogenously.
- Best result achieved due to the suitable medium speed (RPM) and the "V" shape of the container.
- The 'V' shape gives sufficient continuous movement to the particles thereby resulting in better quality blending.
- Safe operation of the unit ensured.
- Easy handling, cleaning, loading and unloading.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 50 Kgs to 3,000 Kgs, as per client's requirements, depend on Bulk Density.
- All bur machineries/equipments depidesigned, engineered and manufactured with strict achievance to a GMP code.
- # All contest code and menta of mentant ATSLSS 304/31A/31A/

# **BLENDERS**







### Octagonal Blender

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Most suitable for dry mixing of materials in granular form.
- Gives best result for granules due to slow RPM and the octagonal shape.
- Provided with limit switch for operator's safety.
- Bigger batch size at low power consumption.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 50 Kgs to 3,000 Kgs, as per client's requirements, depend on Bulk Density.

#### Ribbon Blender

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- The container shape and the mixing stirrer gives continuous movement resulting in better quality mixing and blending.
- Ribbons are designed in such a way so as to provide both radial and linear motion for a complete homogenous mixing.
- Provided with dust proof top cover with window.
- Various types of ribbon blenders such as Pressure,
   Double Spiral etc. are available.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 50 Kgs to 5,000 Kgs, as per client's requirements, depend on Bulk Density.
- All our mochineriet/equipments are designed, engineered and
- All contact starts are made of genuine ATS155 30A/316/316L grade.

# **BLENDERS**





# Double Cone Blender

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- The conical shape at both ends of Double Cone Blender enables uniform mixing and easy discharge.
- Manual rotating facility with hand wheel for inching.
   The same will be provided.
- The conical shape on both ends ensures uniform mixing and easy discharge.
- Worm reduction gear used for speed reduction.
- Safety guards provided with limit switch to achieve maximum safety level.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 50 Kgs to 3,000 Kgs, as per client's requirements, depend on Bulk Density.

#### Vertical Blender

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- An asymmetrical contilevered machinery with a single helix.
- The helix will self-rotate and the screw arm's revolution complete convection, cutting and diffusion to achieve mixing.
- Modern PLC with manual operating system.
- Can be applied in mixing, reaction, drying and cooling of materials.
- Small amount of liquid can be atomized and sprayed.
- Available in batch capacities ranging from 50 Kgs to 5,000 Kgs, as per client's requirements, depend on Bulk Density.
- All our machinenes/equipments are designed, engineered and minutestured with that polymence to pOMP code.
- All covered parts are made of community ATSLST 3D47 (LA/3) At anula.



# PHARMA TABLETING





- The efficient way for Single & Double rotary tableting.
- Double Layer & Pre-compression also available.
- This rotary tablet press machine is built as per the cGMP directives with total robust construction.
- This machine is very useful for small to medium batch size production.
- Modern PLC operating system.
- Easy operation and maintenance of this machine make it very much popular.
- Available in ranging from 8 Station to 72 Station.



### Metal Detector with De-Dust Collector

A metal detector is an electronic instrument which detects the presence of metal nearby. Metal detectors are useful for finding metal inclusions hidden within objects, or metal objects buried underground. A target is any metal object that can be detected by a metal detector. Some of its features are:

- Very high throughput rate
- Superior detection capability
- Maximum configurability

- All our machiners requipments are designed, engineered and inconfectured with strict polluments to r GMP code.
- All sustant costs are made of particle AFSLSS 304/316/3161 produce





### Coating Pan

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Extensively used for sugar and film coating of tablets, pallets and granules.
- Comprises of ellipsoidal shaped pan fabricated using S5 plate, mounted on gearbox shaft, driven by an electric motor.
- The complete drive unit is enclosed in a sturdy unit.
- Heaters are interlocked with the blower motor, therefore unless the blower is on, the heater does not start.
- Modern PLC operating system.
- Available in Model 12" 18" 24" 30" 36" 48" 60"
   72 Inch.

### Vacuum Transfer System

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Capable of vacuum conveying of upto 2,700 kg/hr of material at distances upto 300 ft.
- Ideal for long distance conveying and where product degradation is a concern.
- Assure dust free operation since the product is conveyed under vacuum.
- Designed to meet sanitary standards and provides hygienic transfer of materials.
- VTS represent a more intelligent method of cleaning and removing materials from large tanks.
- Available in all ranges suiting client's requirements.
- All our modification equipments are designed, engineered and associated with start orthogonals to CSAP code.
- All contact parts are mode of genuine ATSI 55:304/316/316L grade.







#### **Tablet Coater**

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Efficient aqueous organic solvent based film coating as well as sugar coating of tablets, pallets, granules and seeds.
- Automated process technique for coating as coating fluids are sprayed/dosed on the product by means of a state of the art of Spray Gun.
- Complete automatic modern PLC control system.
- Outlet Exhaust Blower with wet scrubber for treatment of exhaust air for pollution free.
- Double scan inside SS 304 and outside powder coated Inlet AHU (air handler unit) with pre filter, final filter, HEPA filter and heat exchanger.
- Peristaltic pumps with variable drive so as to give controls dosage of the spray guns.
- Solution holding tank with pneumatic stirrer for thorough mixing of solvent.
- CIP system for washing.
- Available in Model 12" 18" 24" 30" 36" 48" 60" & 72 Inch.



### Rotocone Vacuum Dryer

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Low drying temperature, fast drying.
- Easy to clean internal surface.
- Continuous vacuum maintenance during process.
- Dust filter is provided to filter solid particles.
- Suitable size condenser; Receiver is provided for solvent recovery.
- Cyclone separator to recover the solid particle.
- Also performs mixing function due to rotational movement, and thereby reducing the processing time.
- Modern PLC with manual operating system.
- Available in batch capacities ranging from 50 Kgs to 3,000 Kgs, as per client's requirements, depend on Bulk Density.



### Magnetic Mixer

Available in standard cGMP and customized models with SS 304/316/316L contact parts.

Vessels other than bioreactors like media preparation, buffer preparation etc. which are part of the bioprocess require mixing. Bottom magnetic mixers are used in these types of vessels.

The bottom magnetic mixers are similar to the magnetic agitator other than impellers and normally come without a shaft. The magnetic mixer is designed for liquid mixing application and complies with the most stringent cleaning ability and sterilization requirements. Bottom magnetic mixers are totally cleanable and sterilization in place. This factor is very important in the cGMP compliant.

Available in capacities ranging from 50 Litres, to 2,000 Litres, as per client's requirements.

- All our machinumes/equipments are designed, engineered and monufactured with drict adherence to cGMP code.
  All contact parts are made of genuine AT\$155.304/316/316L grade.





### Liquid Manufacturing Plant

The Liquid Manufacturing Plants are ideal tools for the pharmaceutical industry for the production of Oral and Suspension Liquid.

It is specially designed to take care of two critical factors which directly affect the quality of liquids. Minimum manual handling of Liquid.

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Designed exclusively to be used by operator and one helper. All vessels are suitable for internal pressure of 1.5kg/cm² and hence can be sterilized.
- All pipes, pipe fittings and valves are of seamless quality, internally electro polished with tri clover ended points.
- Below are some of its chief features:
  - Load cell for accurate weighing.
  - Modern PLC based with manual control panel for process automation.
  - o CIP system for washing.
- All material transfers are done by vacuum or by transfer pumps. The entire plant can be operated by centralized operating panel capacity ranging from 50 Litres to 10,000 Litres.
  - All our mochineries/equipments are designed, engineered and manufactured with strict adherence to cGMP code.
  - All contact parts are made of genuine ATSLSS 304/916/3161 grade.

# PHARMA & COSMETICS





# Contra Rotary Mixer

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Designed exclusively for mixing of ointments, pastes, creams as highly applicable in Pharmaceutical and Cosmetic industries.
- Double contra rotary blades creating a laminar thinning of materials ensure uniform mixing.
- Precision design favours intensive mixing, dispersing and kneeding of products of any level of viscosity.
- Supplied as a complete unit, only requires levelling and connection to electrical and air supply.
- Perfectly designed to withstand the vacuum created during the mixing process.
- Provided with jacket for cooling or heating as per application.
- Enriched with vacuum operation, agitation and jacket suitable for steam heating.
- Available in batch capacities ranging from 50 Kgs to 5,000 Kgs, as per client's requirements.

## Planetary Mixer

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Designed exclusively for mixing of ointments, pastes, creams, dry powder and wet mass.
- Precision design favours intensive mixing, dispersing and kneading of products of any level of viscosity.
- Specially designed agitator profile.
- Supplied as a complete unit, only requires levelling and connection to electrical and air supply.
- Applicable in Pharmaceutical and Cosmetic industries.
- Available in batch capacities ranging from 50 Kgs to 1,000 Kgs, as per client's requirements.
- All our machineries equipments are designed, engineered and
- All context parts are made of genuine ATSLSS 304/316/316L grade.



# PHARMA & COSMETICS



### **Ointment Manufacturing Plant**

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Comprehensive range of ointment/cream manufacturing machineries for manufacture of creams, gels, sterile/non-sterile ointment and biotech products.
- The process is untouched and more hygienic.
- Comes with inline homogenizers, dual speed anchor agitators, hydraulic lid quick openable electroplated pipe fittings etc. and facilitate cleaning at the time of product change over.
- The plant is provided with pre-mixing wax and water phase vessels and the main manufacturing vessel.
- Below are some of its chief features:
  - o Load cell for accurate weighing.
  - a Modern PLC based with manual control panel for process automation.
  - CIP system for washing.
- Available in batch capacities ranging from 50 Kgs to 3,000 Kgs, as per client's requirements.

# PHARMA & COSMETICS



### Clean in Place (CIP)

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Pre rinse with WFI (water for injection) or PW (purified water)
  which is performed to wet the interior surface of the tank
  and remove residue. It also a non-chemical pressure test of
  the CIP flow path.
- Caustic solution single pass flush through the vessel to drain.
- Caustic is the main cleaning solution.
- Caustic solution recirculation through the vessel.
- Intermediate WFI or PW rinse.
- Acid solution wash used to remove mineral precipitates and protein residues.
- Modern PLC with manual operating system.
- Available in capacities ranging from 50 Litres to 2,000 Litres, as per client's requirements.

#### Reactor

- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Allow the chemical inside to go through a reaction phase, producing ultimately different and new chemical properties.
- Best suited for high temperature and pressure applications.
- Available in 2 models: Limpet racketed and jacketed reactor.
- Find application in Chemical, Pharma and R&D facilities
- Available in capacities ranging from 50 Liters to 20,000 Liters.
- Customized reactors are available to suit client's requirements.
- All our machinerieu/squipments are designed, engineered and exercised with strict adherence to cGMP code.
- All contact parts are made of arraine ATSI \$5,304/316/3161 grade.



# PHARMA, COSMETICS & CHEMICALS

### Vacuum Tray Dryer



- Available in standard cGMP and customized models with SS 304/316/ 316L contact parts.
  - For drying high grade. temperature sensitive and oxygen sensitive materials are used.
  - Double door loading available for large models.
- Available in Model 6, 12, 24, 48, 96 Trays.

### Heat Exchanger



- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Massive output parameters coming out of relatively. small input parameters.
- Available in capacities ranging from 1 M2 to 100 M2.
- Customized Heat Exchanger, are available to suit client's requirements.

# Tray Dryer



- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Oven equipped with dry and wet air exhaust.
- Available in Model 6, 12, 24, 48, 96, 192, 240 Trays.

#### Pilot Ointment Plant



- Available in standard cGMP and customized models with SS 304/316/316L contact parts.
- Caters to the demand of Cosmetic and Pharma industries for cream/aintment manufacturing. Fabricated with high grade, rust proof materials attuning to international quality standards.
- Precision engineered with high tensile strength and superior functionality.

### Sparkler Filter



- Available in standard cGMP and customized models with SS 304/316/316L contact
- Filtration done under positive pressure.
  - Provided with safety valve and sample collecting device.
- Available in model 8" 14" 18" 24" 30" dia, as per client's requirements.

### Homogenizer



- A complete sophisticated machinery designed for Pharmaceutical, Life Science, Bio Technology, Agricultural, Microbiology, Chemical Research and Development.
- Available in capacities ranging from 2 HP to 30 HP, High customizable to suit client's requirements.
  - All our mechineries/equipments are designed, engineered and manufactured with street adherence to cGMP code.
     All contact parts are made of genuine ATSI SS 304/316/316L grade

#### Why Us?

- Open, honest and active communication with our Customers.
- Carefully prepared, fair pricing agreements with clearly stated expectations.
- A commitment to deliver Customer requirements within the specified timelines.
- We strive for a Positive Attitude and approach to problem solving to ensure Complete Customer Satisfaction.
- A team approach to custom automation, empowering all our employees to be involved and accountable.
- Experienced in engineering complete, efficient systems to meet customer's individual requirements.
- Very finest precision adherence quality machinery and at the same time the lowest priced.

#### Above all.

We have an integrated administration system with highly skilled Engineers, Technicians and Craftsmen, with a high production capacity and certified under ISO. And thus we guarantee our clients in receiving a High Quality Product-line.





#### Factory & Head Office:

Plot. No.5175, GIDC, Ankleshwar -393002 Gujarat, INDIA Phone No. +91-(2646)-221175, 225175 Email: admin@ipecengg.com, marketing@ipecengg.com Website:- www.ipecengg.com www.pharmaceuticalmachineriesipec.com

#### Sales Office:

502, Neelkanth Avenue-1, Navjeevan Press Road, Ashram Road Ahmedabad- 380014, Gujarat, INDIA Contact No: +91-9979904509, +91-9727277760 E-mail: ceo@ipecengg.com | smit@ipecengg.com