

Machine Sazi PERGASTEB Registration No. 1901

PERGASTEB

Designer and manufacturer of different types of pharmaceutical machinery For solid, semisolid, and liquid products

Designer and manufacturer of all size parts for sterile, solid, and liquid production lines

M. P. P

Machine Sazi Pergasteb
PERGASTEB
Pergasteb Pasargad Technical and Engineering Group

Manufacturer of all types of industrial, pharma, and food machineries as well as all size parts for solid, semisolid, and liquid production lines



PERGASTEB Technical and Engineering Group proudly manufactures all types of machineries used in food and drug industry as well as all types of molds and spare parts using top-quality, well-analyzed steel and aluminum alloys available in the market and supply them after production at a reasonable price to increase customer satisfaction. Relying on experienced staff who specialize in the field and its 12 years of experience in designing and manufacturing food and pharma size parts and machineries, PERGASTEB is ready to provide any service in this area.

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Conveyor

A conveyor system is a piece of handling and storing systems in industrial applications. Novel technologies and advanced control engineering knowledge have placed conveyor belts and other material handling equipment among modern technologies with a wide range of applications from medium industries such as small production and assembly lines to large industries like petrochemical, steel, automotive, food, and pharma industries.





- Easy servicing and maintenance and long life
- Adjustable speed
- Easily washable and cleanable
- A frame made of 304 stainless steel
- Customized design and make for different dimensions and capacities
- Comes with quality assurance documents

High-Speed Mills

High-speed mills are used to crush and mill hard and large masses at high rotation speeds. The blades inside the mill can be adjusted as hammer or cutting blades, each with its unique applications and advantages. These mills are designed in two models:

- FitzMill design
- WAZER design

Applications

These mills are widely used in pharmaceutical, chemical, and food industries to grind and granularize large masses to reduce them in size and create uniform particles.

- Easy installation and maintenance and long life
- Equipped with cold water system to prevent heating and burning
- Body frame made of 304 and 316L steel
- Easily cleaned
- Smooth reflective walls
- Low noise
- Compatible with the latest food and pharma standards
- A capacity of milling up to 1000 kg per hour
- Operating at two modes as cutting and hammering blades
- Equipped with speed control system for working with differently sensitive materials
- Equipped with meshes of different sizes for various products
- Comes with quality assurance documents

Frewitt Mill

Frewitt mills come in two models: 360-degree rotation model and oscillatory movement model. Using their smooth and constant movements, these mills guarantee a uniform particle size in the output. In addition, due to its low mechanical stress, Frewitt mill enables milling for heat-sensitive products. The mill can also be designed and incorporated into closed system with automatic feeding mechanisms.

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- Easy installation and maintenance and long life
- Body frame made of 304 and 316L steel
- Easily cleaned
- Smooth reflective walls
- Low noise
- Compatible with the latest food and pharma standards
- A capacity of milling up to 500 kg per hour
- Equipped with meshes of different sizes for various products
- Comes with quality assurance documents

Comil

Comil design mill is widely known for its applications in pharma, food, chemical, and cosmetic applications across the world and is the top choice for process managers who look for optimal process efficiency and product-friendly applications.

Comil has experienced progress since its initial design, but it is widely known as a progressive milling technology often used in the following applications:

- Milling granules before drying
- Milling dry granules before making them into pills

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 Comes with quality assurance documents 	

Delumper

In the pharmaceutical industry, delumper is used to crush lumped materials such as metformin and other substances that form conglomerates and lumps before being mixed, milled, and sieved. The device can crush materials at different capacities, be installed on IBC containers, and transfer milled products from the device using portable suction machines to other equipment including HMG blenders, electric sifter machines, and FBD. It is compatible with all GMP standards.

- Easy installation and maintenance and long life
- Body frame made of 304 and 316L steel
- Easily cleaned
- Smooth reflective walls
- Low noise
- Compatible with the latest food and pharma standards
- Equipped with meshes of different sizes for various products
- Comes with quality assurance documents

High Shear Mixer (HSM)

HSM machines are among the primary machineries used in wet granulation at large batch sizes to mix and prepare granules for drying in FBD or tray driers.



- Body frame made of 304 and 316L steel
- Smooth, reflective inner surface
- Usable with lifter to lift materials
- Easy cleaning and washing
- CIP compatible
- Equipped with Comil at the output
- Enables design for closed systems
- Production capacity at laboratory levels up to higher levels
- Comes with quality assurance documents (IQ-QQ)

Fluidized bed dryer (FBD)

FBD is widely used in food, pharma, and chemical industries to dry wet granules produced in the mixing process. Its basic operation is based passing hot air fluid through wet granules. The hot air passing through a mesh embedded into the device together with a lifting mechanism guarantee excellent heat transfer and quick drying. The cloth filters embedded into FBD equipment prevent external substances from entering the device. In addition, FBD can be used to spray glue or paint solutions to paint products or make granules.



- Drying, granulation, and paint and coating
- Highly flexible
- Quick and easy filter replacement
- Easy cleaning and washing
- CIP compatible
- Body frame made of 316 or 304 steel
- Can be designed for closed systems

Blender

Blender is a machine used by pharmaceutical and food companies to blend powders and granules into a uniform mixture. It is manufactured in different sizes and designs depending on what customers need. In addition, its body frame is made of 304 or 316 steel depending on the material used. As it uses a closed-circuit design, the dust caused by movement of light powders or vapors from chemical liquids will not leak into the environment surrounding the tank and the blending process will take place in complete safety, causing no dust or pollution. Blenders come in three models:

- Blender V
- Double cone blender
- Octagonal blender



- Body frame made of 316 or 304 steel
- Smooth inner surface
- Can be used with a lifter to lift materials
- Easy cleaning and washing
- CIP compatible
- Equipped with Comil equipment at the output
- Can be designed into closed systems
- Production capacity at laboratory levels up to higher levels
- Comes with quality assurance documents (IQ-QQ)

Autofill powder transfer machine

The powder transfer device is used to automatically transfer pharmaceutical and food substances and granules from one point to another. This device can be installed on the hopper of tablet press, capsule filling machine, grinder, blender and sachet filling machines. The operation of this device is based on the vacuum pressure from the motor side channel built inside the device. Once the material is transferred to the hopper and the desired volume is reached, the machine stops and waits for the next work cycle.



- Easy installation and maintenance and long life
- Easy to wash and clean
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 and 316 steel
- Automatic pneumatic cleaning system for air filters
- Non-return mechanism to prevent materials from returning to the equipment
- Equipped with a sensor to sense when the hopper is filled
- Can be designed to accommodate a capacity of 1000 kg per hour
- Easy settings and equipped with a user display panel in Persian
- Comes with quality assurance documents

Dust Collector

Dust collector is used to collect suspended particles that are dispersed in the air at different stages of the production process. After sucking the air and the accompanying dust particles, this device separates the particles from the air through a filter and returns the uncontaminated air to the environment. The separated particles are collected in a tank and can be easily disposed of or reused.

Dust collector can be connected to pharmaceutical devices such as tablet press machine, capsule filling machine, pill blister packing machine, and vacuum blender.



- Easy installation and maintenance and long life
- Easy to wash and clean
- Equipped with washable, replaceable filter
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 and 316 steel
- Can be designed to accommodate a capacity of 1000 kg per hour
- Easy settings and equipped with a user display panel in Persian
- Comes with quality assurance documents

Capsule Polishing and Sorting Machine

This machine is used to dedust capsules at the output of the capsule filling machine and to sort empty capsules. Through the mechanism used for this machine, once the product is fed into the machine, it is directed upward by a rotating brush inside a cylindrical mesh case and this will remove dust from capsules. Next, the product enters the sorter where air pressure separates empty and half-filled capsules from properly filled capsules at the output.



- Easy installation and maintenance and long life
- Easy to wash and clean
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 and 316 steel
- Low noise, smooth and controlled movement remotely adjustable
- Adjustable height
- Optimal design and size
- Comes with quality assurance documents

Homogenizer Mixer

Homogenizer mixer is a complete set of equipment used to produce different types of emulsions and suspensions for food, cosmetic, pharmaceutical, and chemical applications. Homogenizing is in fact a process and an operation where materials and particles are homogenized into smaller sizes. Homogenizer mixer is known by other names such as vacuum mixer homogenizer, homogenizing mixer, homogenizing tank, high shear mixer, and rotor-stator mixer.



Applications

- Cosmetic industry
- Producing different types of emulsions and suspensions
- Paint and resin industry
- Crushing and milling in food industries
- Dairy industry
- Chemical processes
- Producing syrups, ointments, ampoules, and coated pills in pharma industry

- Easy installation and maintenance and long life
- Easy to wash and clean
- Body frame made of 304 and 316 steel
- Remotely controlled drive
- Customized design based on viscosity and speed requirements
- Comes with quality assurance documents

Capsule Sorter and Loader

Capsule sorting and loading machine is used to sort and separate crushed capsules from other properly filled whole capsules in the capsule filler. The mechanism used here involves creating positive air pressure by a motor side channel and transporting empty capsules to the hopper in the capsule filling machine. In addition, the vibrator embedded in this machine complete the sorting and separation of empty capsules.



- Transportation capacity up to 200,000 capsules per hour
- Easy installation and maintenance and long life
- Easy to wash and clean
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 and 316 steel
- Equipped with meshes of different sizes to produce various products
- Low noise and vibration
- Comes with quality assurance documents

Tablet Deduster Machine

Deduster causes vibration in the meshes embedded into the machine to remove dusts from the final product. Deduster comes in two types: vertical deduster and horizontal deduster.

Applications

Deduster is majorly used by pharmaceutical companies to remove dusts and residuals from tablets once they leave the press machine.



- Easy installation and maintenance and long life
- Easy to wash and clean
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 and 316 steel
- Equipped with meshes of different sizes to produce various products
- Low noise and vibration, smooth and remotely controllable movements
- Adjustable height
- Optimal design and size
- Comes with quality assurance documents

Deblistering Machine

This machine is used to open and remove pills from the wasted blisters used by the blistering machine in pharmaceutical companies. The mechanism involves passing blisters through the space between a rubber roller and adjusting blades to transport the pills and capsules existing inside the blister to the outside of the machine.



- Easy installation and maintenance and long life
- Easy to wash and clean
- Easily adjustable for different blister sizes
- Body frame made of 304 and 316 steel
- Low noise and vibration, smooth and remotely controllable movements
- Optimal design and size
- Comes with quality assurance documents

Electric Sifter Machine

This vibrating electric sieve machine is used to separate and create uniform granular particles and powdered materials. The main structure of the machine consists of a vibrating motor and meshes of different sizes depending on the required sifting size. The machine can be used by pharmaceutical, food, and chemical industries to separate impurities and unwanted large particles from the primary materials.



- Easy installation and maintenance and long life
- Easy to wash and clean
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 and 316 steel
- Equipped with meshes of different sizes to produce various products
- Low noise and vibration, smooth and remotely controllable movements
- Comes with quality assurance documents

Tray Dryer

Tray dryer is used to dry pharmaceutical wet granules, steel devices, and other materials and substances in different industries. The device consists of a chamber with input and output doors and dries items put on the tray using a fan, steam coil, or an element built into the device to circulate hot air.



- Interlocked doors
- Temperature and humidity sensors
- Customized design in different sizes
- Customized design for explosion-proof systems
- Monitoring system for online display of temperature and humidity
- Customized body frame made of 304 and 316 steel
- Comes with quality assurance documents (IQ, QQ)

Punch and Die Cabinet

This is used to keep punch and matrix set for tablet press machine



- 15 lockable drawers
- Body frame made of 304 steel
- Each drawer has two ABS trays
- Capable of keeping 600 punches
- Central lock

Single-Wall, Double-Wall, and Three-Wall Containers

Made of 316 or 304 stainless steel, these tanks are used in the process of making or storing materials in liquid and semi-solid production lines.

IBC Bin

IBC bins are used to store and handle certain chemical powders, dust, and granular substances, mainly in pharmaceutical industries. The process is in place to ensure a dust-free operation and prevent contamination by human. These bins come in customized models in different volumes and designs as needed by customers.



- Body frame made of 304 or 316 steel as needed by customers
- Customized design for automatic washing systems
- Smooth and reflective inner surface
- Equipped with butterfly valves having food grade rubber
- Can be used in closed systems

Rotary Table

Also known as rotating table or rotary tray, rotary table consists of a rotating tray or table to direct and collect containers used in the process. Used as an accessory in packaging industry, the equipment can be employed to automatize production line and increase speed and accuracy. It presents a perfect solution for production mills with medium to very high production capacity per day.



- Body frame made of 304 steel
- Tray made of aluminum with steel coating
- A controller for tray speed
- Rotation speed display
- Direct-coupling gearbox and motor
- Customized design in different sizes as needed by customers
- Comes with quality assurance documents (IQ, QQ)

Lifting Machine

Lifter or lifting machine is used to lift storage bins and to put them on other machines and devices. It has been designed to transport dust-free materials in sensitive and risky processes as an attempt to enhance CGMP standard and to eliminate the laborious manual operation. These lifters are designed in different models and sizes to be used by customers in different applications and work environments.



Applications

Lifters can be used to

- Lift granule bins and place them on capsule filling or tablet press machines;
- Lift tablet bins and place them on blistering machine;
- Transport raw materials from mixers and blenders;
- Lift and rotate bins to empty their content; and
- Lift and rotate bins in shelf blenders.

- Easy installation and maintenance and long life
- Easy to wash and clean
- Easy assembly and disassembly when cleaning and replacing the product
- Body frame made of 304 steel
- Customized design to accommodate a capacity up to 1,000 kg
- Comes with quality assurance documents (IQ, QQ)

Different Types of Perforation and Cutting Stations for Blister Packing Machines



Different Types of Feeders



Size Parts for Solid, Semisolid, and Liquid Production Lines

