OUR PRESTIGIOUS CLIENTS

1. LAXMI ORGANIC INDUSTRIES LTD., CHIPLUN
2. PIRAMAL ENTERPRISES LIMITED.
3. ALKEM HEALTH SCIENCE
4. ADAMA INDIA PVT LTD
5. HAMDARD LABORATORIES
6. AVT NATURAL

CAPPRO EQUIPMENT

Regd. Office : 14, Yamuna Mukund CHS., Near Park, Thane (W) - 400 601
E-mail : capproequipment@hotmail.com

CAPPRO - 'Solving Problems Capably'

OUR VISION

To be the leading Equipment Manufacturing Company,
with the highest customer satisfaction

OUR MISSION

Creating Trusted and Charitable long term relationships with our Client providing them value for money.

CAPPRO EQUIPMENT

Manufacturer & Designing of Pharma, Chemicals,
Cosmetics, Food and Beverage Process Equipments.

JET MILL

Micronising is a process extensively used by the pharmaceutical, chemical, agro-chemical, pigment and cosmetic industries for the production offline powders.
The Micronising Mill is suitable for virtually any materials requiting ultra fine grinding, whether in campaign or continuous production. Special linings are available for cohesive and for abrasive materials. This is best suited for heat sensitive materials, because the cooling effect of grinding fluid as it expands at the jets and material remains cool.
It is possible to produce powders that are predominantly upto 5micron for use in.

JET MILL

Model	2" Air Jet Mill	4" Air Jet Mill	8" Air Jet Mill	12" Air Jet Mill
Reqd CFM of Air	20	55	120	230
Compressor Power Reqd – HP	5	10	30	62
Output Capacity Kg/Hr	0.1Kg to 0.75Kgs	1 Kg to 6 Kgs	10 Kgs to 50 Kgs	20 Kgs to 100 Kgs
Milling Chamber MOC	SS -316	SS -316	SS -316	SS -316
Optional - Lining	Teflon & Haler Coating	Teflon & Haler Coating	Teflon & Haler Coating	Teflon & Haler Coating
Receiver Capacity	1 Kgs	10 Kgs	60 Kgs	125 Kgs

E-mail : capproequipment@hotmail.com

MULTIMILL

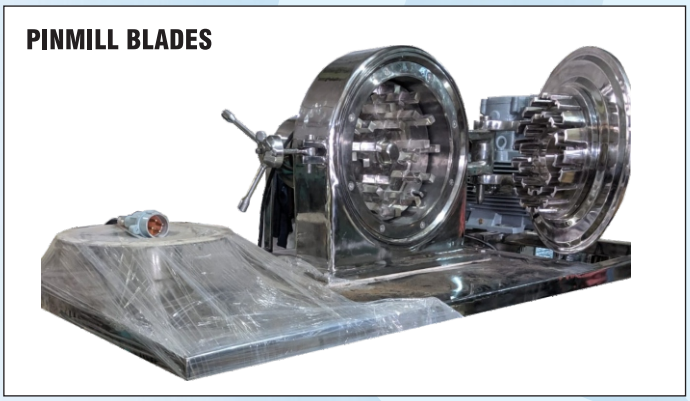
Multimill is used to reduction in particle size, by chopping process. Cutting blades consists of sets of knife blades and rotate at high speed to chopp the particles and reduce it. During chopping process it passes through required Sieve, to get the particle size.

Multimill is mounted on stand, material feeding through side charging Hopper.

Model	MM-100	MM-200	MM-500
Motor HP x RPM	1 HP x 1440	3 HP x 1440	5 HP x 1440
Out-put Per Hour in Kgs	100	200	500
Rotor Assembley Diameter in mm	150	250	350
Rotor Speed in RPM	750/1500/2300/3000	750/1500/2300/3000	750/1500/2300/3000
Beaters	12 Knife & Impact Edges & 2 - Scrapper Blades	12 Knife & Impact Edges & 2 - Scrapper Blades	12 Knife & Impact Edges & 2 - Scrapper Blades
Screen Diamensions	160mm Dia x 135mm Ht	260mm Dia x 135mm Ht	350mm Dia x 200mm Ht
Starter	DOL with Reversible Switch	DOL with Reversible Switch	With VFD Panel
Machine Charging Height	1250mm	1450mm	1450mm
Overall Dimensions	850 x 950 x 1630mm	850 x 965 x 1630mm	850 x 950 x 1630mm

MULTIMILL

PINMILL



PINMILL BLADES

Pin mill work by similar principle as hammer mills (impacts and shearing) but with typically faster tip speed rotor-stator configuration of intermeshing pins which impact the particles as solids are directed through the intermesh pins. The mill product leaves by centrifugal forces to the periphery and is then collected or further processed. This method of milling is most likely to produce materials in the micronized regime (as upto 70 mesh) and with uniform product size.

PINMILL

Model	PinMill 250	PinMill 500
Motor HP x RPM	10 HP x 2880	20 HP x 2880
Out-put Per Hour in Kgs	250	500
Rotor Assembley Diameter in mm	300	500
Rotor Speed in RPM	4200	4200
Starter	DOL Starter	DOL Starter

E-mail : capproequipment@hotmail.com

PASTE KETTLE

It is also called Starch Paste Preparation Kettle. It is Widley used to prepare the Starch paste / Binder to mix with the powder during granulation process. It is in a Semicircle shape with jacket to heat the Binder or liquid. An Anchor type agitator from the top for uniform mixing of solution. After completion of process conical bowl has tilted and discharge the solution.

PASTE KETTLE

FILTER PRESS

FILTER PRESS

Zero Hold Up Sparkler Type Filter is the most versatile and highly efficient, compact, dewatering device for separating solids from liquid slurries in the form of compressed cake. It can also be used apart from filtration with the help of filter aids for giving a sparking effect to the liquids filtered.

The filters are most suited for the filtration of product for the pharmaceutical, chemical, distillery, beverage, ink, oil and other allied. Most useful for clear filtration of sugar syrups, liquids, beverages, chemicals, pharmaceuticals, Perfumes,

Filter Press works on the principle of pressure feeding. Filter Press is considered the most efficient filtration machine due to its significant properties. It has a substantial flowrate with quality output. Liquid flows through the centre rod then persuasively drawn to numbers of filter pads and filter plates. Under positive pressure, the unfiltered liquid is slowly fed into the filter. In the filter, the liquid travels in downwards direction. The liquid reaches the opening on sides of the filter plates. As the pressure of the liquid increases, the filter media present in the system holds the foreign particles. The clear filtrate without any foreign particle gets passed through the central channel made by interlocking pressure cups to the outlet. The filtration in the sparkling filter is carried out until the holding capacity of the cake is reached or until the rate of filtrate flow becomes too slow.

HOMOGENISER

A homogenizer is a class of mixing devices, which is designed to break particles, both solid and liquid, into a uniform mixture. Homogenizers are a type of mixers, which apply mechanical forces to blend, emulsify, disperse, and dissolve liquid-liquid and solid-liquid systems. Depending on the homogenizer model rotational shear, nozzles or high-power ultrasound are used to create the required forces to disintegrate and break up solid particles as well as liquid droplets.

Capacity of Homogeniser: From 100 Ltrs to 10,000 Ltrs per hour.
Pressure: 0 to 250 Bar

HOMOGENISER

E-mail : capproequipment@hotmail.com

AGITATED VACUUM DRYER

Principle Of Agitated Vacuum Dryer :
Basic principle of Vacuum dryer is lower the heat and higher the vacuum will give the fast result of drying process.

Horizontal Agitated Vacuum Dryer, consists of Shell with Hollow blades, mounted on drive shaft. Blades uniformly shuffling the product while rotating of shaft during drying process., under vacuum. Hot water supply to hollow Shaft and to remove the moisture for fast process of dryng.

Moisture flow from top through filter, where the powder particles stuck-up in filter cloth,

Sampling valve provided on front door to take samples under vacuum. Top loading and bottom discharge are the added advantage of the machine.

For Top charging, Cappro Supply the Powder Transfer system.

AS per the products Material of Construction to be used for machine Like SS 304, SS 316, Hastelloy, Halar/ Teflon coating.

The volume of the wet material loaded into the dryer is restricted to 45-50 % of gross volume.

Capacity from 10 ltrs to 2000 ltrs

AGITATED VACUUM DRYER

AGITATED NUTCHE FILTER & DRYER

AGITATED NUTCHE FILTER & DRYER

The Agitated Nutsche filter dryer (ANFD) designed to separate liquids' solids. It is enclosed and generally operated under pressure or vacuum. Additionally, the equipment is fitted with a stirrer mechanism that efficiently agitates the slurry during cake washing, squeezes the cake during filtration, and assists in the cake's automatic discharge. The Agitated Nutsche Filter consists of a cylindrical shell with Jacket/ Limpet Coil and on of the shell top dished and welded flat bottom. The base plate is having an arrangement of a bolting rod to hold the filter cloth. Suitable support for mesh is provided under the filter cloth. Suitable nozzles are provided, including Manhole and Side discharge nozzle. The solid Shaft is used for the Agitator shaft and solid plate for specially designed blades made in "S" curved shape to take high torque generated during solid discharge and re-slurring operation.

Drive assembly consist of Motor with Hydraulic cylinder and Lantern assembly with Stuffing-box/Mechanical Seal is provided.

A manual/Hydraulic system is provided for the up-down movement of the agitator and discharge Valve.

Control Panel with Contactor, relay VFD etc.

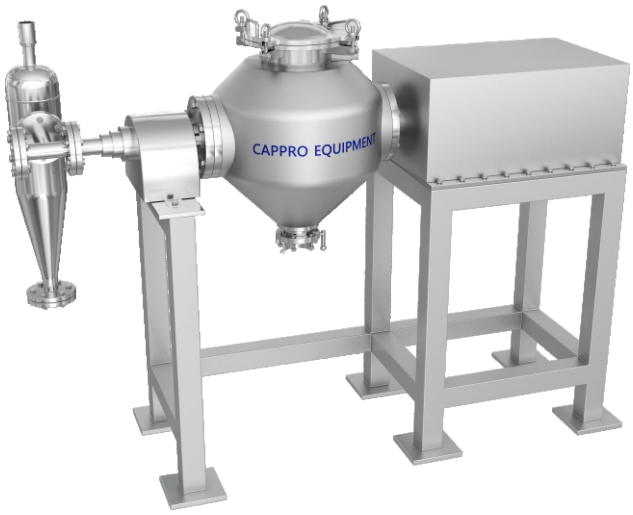
FILTER MEDIA : Sintered metal multi-ply of Textile.

Material of Construction : SS 304/ SS 316, Hastelloy, or MS with Halar coating.

E-mail : capproequipment@hotmail.com

ROTO-CONE VACUUM DRYER

Roto Cone Vacuum Dryer is ideal for temperature sensitive materials. Mechanical Sealing system for Vacuum and Heating line. Product process under vacuum and Indirect heat to release the vapours at low Temp. Having Top loading and Bottom discharging system. Vapor condensation unit along with a receiver for solvent recovery. The drying unit equipped with lump breakers initially breaks large lumps and subsequently powders them. The rotary action of the dryer together with mechanical action of the breakers, cuts down drying time and gives a lump free product.



ROTO CONE VACUUM DRYER

VACCUM TRAY DRYER

VACCUM TRAY DRYER

The basic principal of Vacuum Dryer is lower the heat and higher the vacuum will give the fast result of drying process. Vacuum Tray dryer is a very good for heat sensitive material. Vacuum Tray Dryer is a closed chamber having heating shelves placed vertically inside the chamber, and door at front side open to clean room, where as the utility for the steam/ Hot water at back side of the Dryer and excess to Service area. Header is connected to each heating shelves where the hot water / steam will insert through header to the heating shelves to make heating surface hot. Top surface of Heating shelves should be perfectly straight and parallel to the Powder trays. Heat transfer will take place when the heating shelves and product tray surface are in perfectly in contact with each other.

Vacuum Tray dryer are available in following standard size : 3 Trays, 6 Trays, 12 Trays, 24 trays, 48 Trays, 96 Trays and 192 trays. Holding capacity of each trays around 5 Kgs of wet material.

POWDER TRANSFER SYSTEM

The Pneumatic transfer system is a unique dry powder transfer system for dust free and avoid human touch. The Pneumatic transfer system is used in Pharmaceutical, Food, Bulk Drug, Agro chemical, Sugar Industries and other organic & Inorganic chemicals. The system is used for inline milling, sifting, blending, loading and unloading. The principle of Pneumatic transfer system has been proven to be a better way to move many types of material and a giant step over manual handling. The technology exists for moving virtually any material that can be pulled through a hose or tube. The system is consisting of Blower, cyclone filter and SS or Hose Pipe.

Transfer Rate per Hour : 500 Kgs to 2000 Kgs per Hour, for free flow dry Powder, & 10 Mtrs Total travel distance.

POWDER TRANSFER SYSTEM

E-mail : capproequipment@hotmail.com

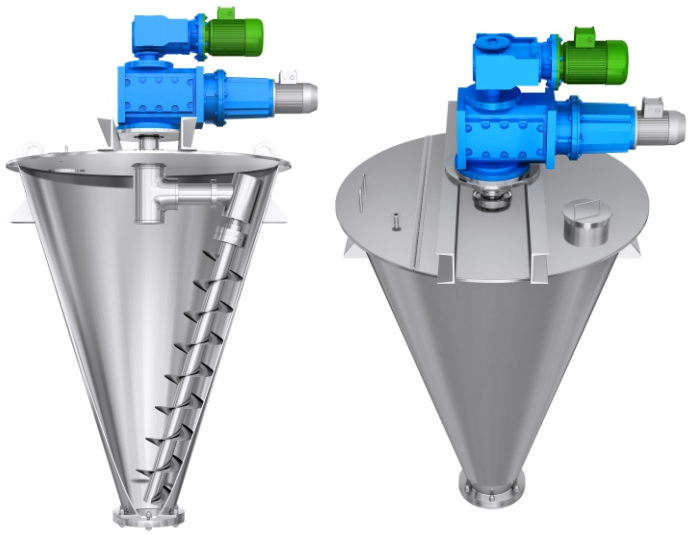
NAUTA MIXER / DRYER

NAUTA MIXER / DRYER is also known as conical mixer, having 3- dimensional mixing, (X-Y-Z Direction) It is a best machine for Homogenise mixing and drying purpose. A screw shaft with blades has rotate on its own axis which lift the bottom material. Screw rotate on the periphery of the conical shell are called Swing Arm, which makes the space for mixing screw. Nauta Mixer/ Dryer has an added advantage the Mixing time is very less. Low energy consumption, Due to closed mixing process, dusting is not there. Hot water/ Steam can be supplied on Jacket of Conical shell. Vacuum applied through dust filter, Condenser and receiver. it works as a good dryer. Extra sub assembly like Lump breaker, Vacuum Dust filter Assembly, Condenser, Receiver, CIP System and Vacuum pump are also supplied as per requirement.

Working Capacity : 15 Ltrs to 10,000 Ltrs ,

Material of Construction : SS 304, SS 316 & MS.

LIQUID MIXER



LIQUID MIXER

LIQUID MIXER

Uniform mixing of Liquid & Solid through marine Impeller connected with 1440 RPM motor. SS 316 Cylindrical shape shell with flat bottom, drive shaft driven by 1440 RPM motor, mounted on top of the shell. Inclined bottom with discharge valve and filter/strainer. Mixing time 15-20 min.

Working Capacity : 30 Ltrs to 5000 Ltrs.

SIGMA MIXER

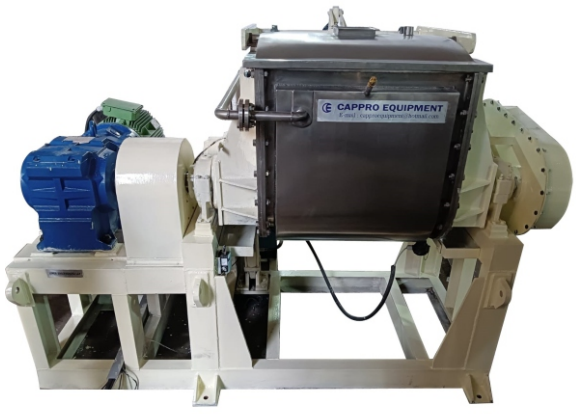
ISIGMA MIXERS to process Viscous to highly Viscous material in various industries viz. Adhesives, Broke lining, Chemical, Confectionery, Carbon Black, Ceramic, Dyes & Pigments, Food Products, Fibre Glass, Grease, Lead Storage Battery, Magnetic Tape Coatings, Paint, Polymers Plastic, Putties, Plastic, Pharmaceuticals, Printing ink, Resin, Rubber, Soap & Detergent, Compounded Hing.

Sigma Mixer consist of “W” shaped container with or without jacket covering two side for heating or cooling application & dust free cover to get Vacuum if desired or normal cover.

The mixing Blades of Sigma type Steel casted and duly finished two in number which contra rotate inward fitted at close or specified clearance with the container to give thorough and uniform mixing. There is a Gland pusher of Gun Metal Bush which ensure minimal friction and extend the life of mixing elements (Blades) Shaft.

The drive unit of Sigma mixer are consists of Motor of Specified HP. 1440 RPM, Reduction Gear Box of Reputed Make having suitable size and ratio, Spur Gears, are also provided of adequate size. The tip speed of the sigma mixer is generally limited to 60 metres per minute.

Capacity of Sigma Mixer : From 5 Ltrs to 5000Ltrs.



SIGMA MIXER

E-mail : capproequipment@hotmail.com

REACTOR

A Reactor is an enclosed Vessel in which a chemical reaction takes place. In chemical engineering, it is generally understood to be a process vessel used to carry out a chemical reaction, which is one of the classic unit operations in chemical process analysis. Chemical engineers design reactors to maximize net present value for the given reaction. Designers ensure that the reaction proceeds with the highest efficiency towards the desired output product, producing the highest yield of product. Energy changes can come in the form of heating or cooling, pumping to increase pressure, frictional pressure loss or agitation.

Reactors contains: Jacket/ Limpet in which the hot water, steam circulation. An agitator Anchor type/ Propeller type. Top and Bottom dished end, Drive assembly on top of the dish for uniform agitation.

Range of Rectors From 50 Ltrs to 10,000 Ltrs,.

REACTOR

PROCESSOR REACTOR SKID MOUNTED

PROCESS REACTOR SKID MOUNTED

R & D Pilot Plants :

Pilot Plants are multi-purpose plants range from 10 to 1000 Ltrs. Suitable for both pressure and deep vacuum work, in a temperatures range of between -30 to 120°C. Separation, extraction and drying equipment, such as Oil heating system, distillation and extraction columns, mixer-settlers, etc with a variety of tools and facility flexibility, solutions can be provided according to process requirements and customer needs.

The pilot facilities are computer controlled and monitored, including alarms/interlocks according to process requirements, providing an additional layer of operational safety and ensures qualified work.

SS RECEIVER

Receiver are commonly used to store the mother liquid which generate during the heating of moisture in powder during drying process. It Contains cylindrical shell with top & bottom dished end, Nozzle for vacuum line, Mother Liquid inlet and discharge nozzle. On Side wall level indicator shows the level of liquid inside the vessel.

Capacity of Receiver from 10 Ltrs to 5000 Ltrs

SS RECEIVER

E-mail : capproequipment@hotmail.com

RIBBON BLENDER

Ribbon Blenders are commonly used for dry powder blending in the process industries. Many products including pharmaceuticals, foods, chemicals, fertilizers, plastics, pigments, and cosmetics are manufactured in Ribbon Blenders. Ribbon blender is a Horizontal mixer having involute mixing blades.

Ribbon Blender comprises of a U-shaped horizontal trough and a specially designed Double Helical Ribbon Agitator rotating within. Ribbon Blenders are based on a proven agitator construction that provides a triple mixing action ensuring fast, efficient blending. Charging from Top and Discharge at Bottom of the machine. The outer ribbon displaces the material from the ends to the centre while the inner ribbon moves the material from the centre to the ends. This counter-current action results in homogenous blending

Capacity of Ribbon Blender: 25 Ltrs to 15000Ltrs.

RIBBON BLENDER

V - BLENDER

V - BLENDER

V blender is also called Twin Shell blender. V blender are ideal for highly accurate and repeatable mixing of powders, granules, and other free-flowing solids. These can be designed to handle extremely high bulk densities and intimately blend very minor ingredients. Materials are constantly being intermixed as the V shell rotates. One main advantage to tumble blending is that it is very low-impact and able to mix friable materials without compromising integrity. Another advantage is the vessel geometry which allows for complete discharge also being easy to access and clean. the unit can be easily cleaned manually or mechanically. During tumbling process the products always split and recombines

Capacity of V - Blender from 5 Ltrs to 4000Ltrs , Mixing Process time from 5 – Min to 30 Min depending upon product to product.

CONTA BLENDER

Conta Blender is suitable for effective, homogeneous and uniform mixing, blending process of dry powder and granules homogeneously for facilitating better flow ability of the material for Capsules & Tableting machine.

The main advantage of this system is that it is totally closed & dust free. The Bin rotate at 5-20 RPM

CONTA BLENDER

E-mail : capproequipment@hotmail.com

DOUBLE CONE BLENDER

Double Cone Blenders are most often used for dry blending of free flowing solids. The solids being blended in these units can vary in bulk density and in percentage of the total mixture. The materials are along with wall of bucket by rotary movement.

It consists of drive part and mixing chamber which attached by two same cones. Double cone blender are often used for intimate dry blending of free flowing solids in powder form or granular form. This equipment is widely used in chemical industry, food process, and pharmaceutical fields etc. Materials being blending are constantly being split and intermixed as the Bowl rotates.

Capacity Available from Minimum 5 Kg to 2500 Kgs and working capacity is 65% of the Gross Capacity.

DOUBLE CONE BLENDER

VIBRO SHIFTER

Vibro has a Greek origin and means “to vibrate.“ The vibration of the machine makes it possible to separate particles of different sizes. The vibro sifter machine basically has an electrically powered motor as shaker or separator mechanism, vibro motor, and vibro cell unit which creates vibration for separation purposes.

Sieving material charged from the charging nozzle on Top lid it passes through required mesh size sieve and discharge the material through side discharge port. Sieve size will be of SS 316 with edges moulded Silicon material. The Standard Sieve are available from 20# to 120#.

To separate the Steel particle if available in sieved material can be separated with magnetic grill to be placed on side discharge nozzle.

Regular Vibro Sifter are available in 12”, 18”, 24”, 30”,36”, 42”, 48”, 60” & 72” diameter in size.

Number of separation Layer will be provided as per requirement . Double Layer, Tripple Layer upto Five Layer.

There are other Type of Vibro Sifters are available: Central Discharge Sifter, Vacuum rated Sifter

VIBRO SIFTER

MAGNETIC GRILL

Technical Specification

Model	12	20	24	30	36	40	48
Screen Size in mm	300	500	600	750	900	1000	1200
Output Kg/Hr. Depend on Sieve Size & Product	2-40	50-200	60-250	75-300	90-300	90-500	100-1000
Motor HP	0.25	0.5	0.5	0.75	1	105	2
Diameter in Height	400 x 900	500 x 900	600 x 1100	915 x 1250	915 x 1250	1015 x 1250	1220 x 1260
Discharge Height	600	600	700	725	700	800	870
Discharge Diameter	75	100	100	100	100	150	150
Charging Diameter	150	200	200	200	200	200	250

E-mail : capproequipment@hotmail.com