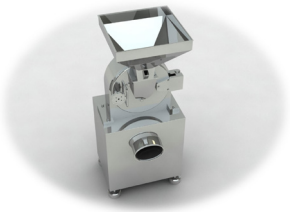
GRAIN TECH LTD

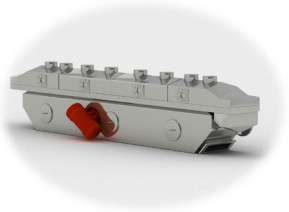
POWDER PROCESSING EQUIPMENT RANGE



MILLING

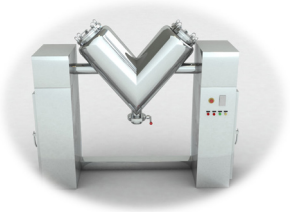
PACKAGING

GRINDING



CONVEYING

GRANULATING



FILTER COLLECTORS

MIXING

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SCREENING

DESIGN, MANUFACTURE, INSTALLATION

PROCESSING, MATERIALS HANDLING & STORAGE EQUIPMENT SYSTEMS FOR DRY POWDERS & GRANULAR MATERIALS

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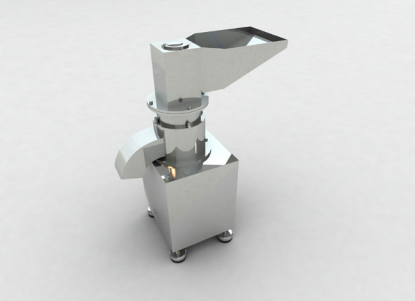
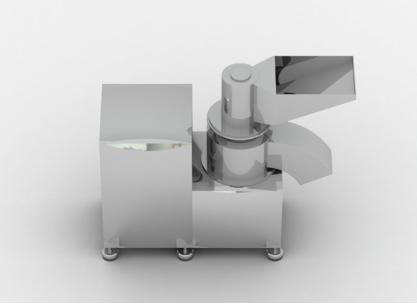
1. GRINDING/MLLING

WCSJ Series Universal Coarse Grinder





Application:
Coarse grinding of a wide range of materials in pharmaceutical, chemical and foodstuffs applications including viscous, hard, soft and high fibre materials Suited for sizing applications.

Operating Principle:
Size reduction is achieved through a combination of both cutting and impact from rotating and fixed knives. Fabrication is from either stainless steel or carbon steel.

Technical Parameters:

Model	Capacity	Feed Size	Output Size	Rotor Speed	Motor Power	Working Noise	Overall Dimension	Weight
WCJS-20 IV,V	100–500 kg/h	≤100 mm	0.5-20 mm	960 r/min	5.5 kW	<70 decibel	560 x 850 x 1280	300 kg
WCSJ-320 IV,V	300–1200 kg/h			1070 r/min	11 kW		1100 x 800 x 1380	600 kg
IV = Mild Steel, V = Stainless Steel								

CSJ Series Coarse Grinder

Application:
This machine is designed as the ideal processing equipment before the fine milling process within the pharmaceutical, chemical and the foodstuff industry applications. Suitable for a wide range of materials and is not limited by viscosity, hardness, softness and fibre content.

Operating Principle:
This grinder has a horizontal type structure where the material is fed into the upper chamber through a hopper and by cutting and impact of both fixed and rotating knives it flows to the exit automatically under gravity and centrifugal force. Designed according to GMP standards and made of stainless steel, this machine has a simple structure, is convenient to clean and operates with a low noise, being the ideal equipment for coarse milling and sizing applications.

Technical Parameters:

Model	Capacity	Feed Size	Output Size	Rotor Speed	Motor Power	Working Noise	Overall Dimension	Weight
CSJ–200 IV, V	80–300 kg/h	≤100 mm	0.5-20 mm	480 r/min	3 kW	70 decibel	900 x 600 x 1440	200 kg
CSJ–300 IV, V	100–800 kg/h				4 kw		900 x 700 x 1440	300 kg
CSJ–400 IV, V	200-1000 kg/h				5.5 kW		900 x 800 x 1440	380 kg
CSJ–600 IV, V	500-1500 kg/h				11 kW		1000 x 900 x 1440	500 kg
IV = Mild Steel, V = Stainless Steel								

WCSJ Series Coarse Grinding/Filter Collector Unit

Application:

This machine is applied as a pre-grinder before fine milling process applications within the pharmaceutical, chemical and foodstuff industries. The mill is a new generation coarse milling type combining milling and material collection within the one machine

Operating Principle:

Incorporating a vertical design structure with the material being fed into the main chamber through a hopper. Size reduction is simultaneous cutting from both fixed moving knives and rotating impact of rotating knife. The milled material automatically is collected under the effect of centrifugal force, and the dust is filtered and recovered by a dust collector. Designed according to GMP standards and made from stainless steel.

Technical Parameters:

Model	Capacity	Feed Size	Output Size	Rotor Speed	Main Motor	Dust Collector Motor	Overall Dimension	Weight
WCSJ-20B IV,V	100–500 kg/h	≤100 mm	0.5-20 mm	960 r/min	5.5 kW	1.5 kW	700 x 800 x 1100	500 kg
WCSJ-320B IV,V	300–1200 kg/h			1070 r/min	11 kW		880 x 900 x 1250	850 kg
IV = Mild Steel, V = Stainless Steel								

YGJ Series Roller Mill

Application:

Mainly used to grind materials which have an oil content, such as, sesame seed, peanut and almond etc., also incorporated where sizing is called for an even final particle size.

Operating Principle:

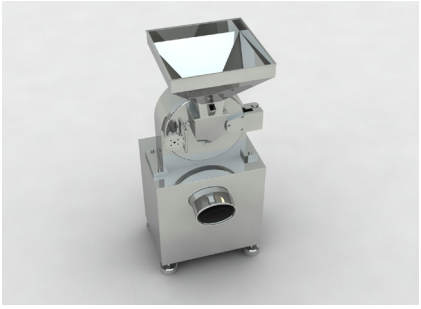
The raw materials are fed into the top roller area from a hopper where they are milled into powder or sized by the action of the rollers. Different size of the final product is achieved by adjusting the gap distance of the rollers. The machine has advantages of reliable and simple operation, low noise and high capacity and is the best mill for oily materials. Different types of roll fluting may be supplied to suit varying milling applications.

Technical Parameters:

Model	Capacity	Milling Fineness	Motor Power	Overall Dimension	Weight
YGJ1-100	20-80 kg/h	8-20 mesh	0.75 kW	500 x 500 x 890	250 kg
YGJ2-100		8-40 mesh	1.5 kW	500 x 500 x 1130	300 kg
YGJ3-100		8-60 mesh	2.2 kW	500 x 500 x 1370	350 kg
YGJ4-100		8-80 mesh	3 kW	500 x 500 x 1610	400 kg
YGJ1-150	50-200 kg/h	8-20 mesh	2.2 kW	720 x 520 x 920	500 kg
YGJ2-150		8-40 mesh	3 kW	720 x 520 x 1160	550 kg
YGJ3-150		8-60 mesh	4 kW	720 x 520 x 1160	600 kg
YGJ4-150		8-80 mesh	5.5 kW	720 x 520 x 1640	650 kg
YGJ1-300	100-500 kg/h	8-20 mesh	3 kW	920 x 700 x 1200	760 kg
YGJ2-300		8-40 mesh	4 kW	920 x 700 x 1480	940 kg
YGJ3-300		8-60 mesh	7.5 kW	920 x 700 x 1760	1120 kg
YGJ4-300		8-80 mesh	7.5 kW	900 x 700 x 2060	1300 kg
YGJ1-500	200-1000 kg/h	8-20 mesh	5.5 kW	1100 x 730 x 1220	950 kg
YGJ2-500		8-40 mesh	7.5 kW	1100 x 730 x 1480	1250 kg
YGJ3-500		8-60 mesh	11 kW	1100 x 730 x 1820	1550 kg
YGJ4-500		8-80 mesh	11 kW	1100 x 730 x 2120	1850 kg

B Series Universal Impact Mill

Application:
Designed for milling within a wide range of applications such as, pharmaceutical, chemical, and foodstuffs etc.



Operating Principle:
Particle size reduction occurs through the action of rotating and fixed fluted discs where material is reduced by impact and friction of the teeth and impact on the material. Designed according the GMP standards and manufactured from stainless steel, with a simple structure, high output and easy cleaning. This type of universal mill is suited to handling a wide range of material types.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Rotor Speed	Motor Power	Overall Dimension	Weight
15B IV, V, VI	10-50 kg/h	6 mm	20-120 mesh	6000 r/min	2.2 kW	550 x 400 x 850	100 kg
20B IV, V, VI	60-150 kg/h			4500 r/min	4 kW	550 x 600 x 1250	280 kg
30B IV, V, VI	100-400 kg/h			3800 r/min	5.5 kW	600 x 700 x 1450	350 kg
40B IV, V, VI	160-1000 kg/h	10 mm		3400 r/min	11 kW	800 x 900 x 1550	550 kg
60B IV, V, VI	500-2000 kg/h	12 mm		2800 r/min	18.5 kW	900 x 900 x 1880	680 kg
80B IV, V, VI	1000-5000 kg/h			2000 r/min	37 kW	1100 x 950 x 1960	1500 kg
100B IV, V, VI	2000-8000 kg/h			1500 r/min	55 kW	1350 x 1000 x 2100	2500 kg
IV = Mild Steel, V = Stainless Steel, VI = Stainless Steel with Water Cooler							

B Series Universal Impact Mill/Filter Collector

Application:
Widely used within industries such as pharmaceutical, chemical and foodstuff etc. This combination mill is a new generation design combining, milling and dust collection within the one unit.

Operating Principle:
Through the relative attrition between moving and fixed fluted discs, the material is milled by impact and friction of the teeth and impact among the material. The milled material enters into the receiving hopper automatically through the effect of centrifugal force and the dust is filtered and recovered by the dust collector. Designed according to the GMP standards and made of stainless steel, this mill has no dust emissions during production.

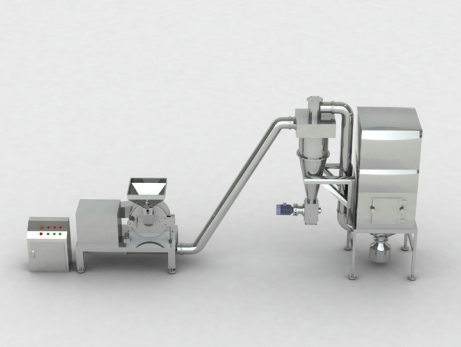
Technical Parameters:

Model	Capacity	Feed Size	Output Size	Rotor Speed	Main Motor	Dust Collector Motor	Overall Dimension	Weight
15B IV, V, VI	10-50 kg/h	6 mm	6000 r/min	20-120 mesh	2.2 kW	0.55 kW	950 x 450 x 1550	220 kg
20B IV, V, VI	60-150 kg/h		4500 r/min		4 kW	1.5 kW	1120 x 600 x 1750	480 kg
30B IV, V, VI	100-400 kg/h	10 mm	3800 r/min		5.5 kW		1250 x 660 x 1750	550 kg
40B IV, V, VI	160-1000 kg/h	12 mm	3400 r/min		11 kW		1450 x 700 x 1750	680 kg
IV = Mild Steel, V = Stainless Steel, VI = Stainless Steel with Water Cooler								

B Series Cyclone Combination Pulse Filter Impact Mill

Application:

This machine is used in industries such as pharmaceutical, chemical, foodstuff and for magnetic materials / powders etc. It is a new generation series combining pneumatic collecting and continuous discharge of the finished milled product.



Operating Principle:

This machine is made up of a receiving cyclone separator, pulse filter collector and pneumatic conveyor fan etc. by means of the motion between moving and fixed fluted discs the material is reduced by impact and friction of the teeth and impact on the material. The milled material flows into the cyclone separator with the bulk discharging from the rotary valve and the particle size can be adjusted by the screen aperture. Designed to GMP standards and made from stainless steel. The installation operates without dust emissions and is suited to ultra-high hygiene milling applications.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Rotor Speed	Main Motor	Dust Collector Motor	R/V Discharge Motor	Overal Dimension	Weight
20B IV, V, VI	60-150 kg/h	6 mm	20-120 mesh	4500 r/min	4 kW	2.2 kW	0.75 kW	3000 x 850 x 2300	580 kg
30B IV, V, VI	100-400 kg/h			3800 r/min	5.5 kW	3 kW		3200 x 850 x 2380	880 kg
40B IV, V, VI	160-1000 kg/h	10 mm		3400 r/min	11 kW	4 kW		3500 x 900 x 2380	1200 kg
60B IV, V, VI	500-2000 kg/h	12 mm		2800 r/min	18.5 kW	7.5 kW	1.1 kW	6600 x 1100 x 2380	2000 kg
80B IV, V, VI	1000-5000 kg/h	15 mm		2200 r/min	37 kW	11 kW	1.5 kW	7800 x 1100 x 2500	3000 kg
100B IV, V ,VI	2000-8000 kg/h			1500 r/min	55 kW	18.5 kW	2.2 kW	9980 x 1280 x 2800	6000 kg
IV = Mild Steel, V = Stainless Steel, VI = Stainless Steel with Water Cooler									

GFSJ Series High Efficiency Impact Mill

Application:

Designed for ultra-fine particle size reduction requirements, this machine is widely used in the pharmaceutical, foodstuff and chemical industries.

Features:

This machine is simple in structure, easy to assemble and clean. The milling chamber and all parts contacting the material are made of stainless steel which is both acid and corrosion resistant. The mill design is in conformity with hygiene requirements. In addition this machine has a smooth operation, convenient access for cleaning, low noise, high efficiency and low power consumption.

Operating Principle:

This machine is a high speed milling unit in which material is reduced by the effect of high speed blades which have a sharp edge on one side and an impact blade on the other. Blades of different sizes and shapes are available to suit different materials and the particle size can be altered through placement of screen or adjustment of speed.

Technical Parameters:

Model	Capacity	Milling Fineness	Adjustable Speed	Motor Power	Overall Dimension	Weight
GFSJ-8A IV, V	10-100 kg/h	12-120 mesh	2100-2800 r/min	3 kW	1050 x 600 x 1600	150 kg
GFSJ-16A IV, V	50-300 kg/h		2100-2900 r/min	5.5 kW	1100 x 860 x 1520	250 kg
GFSJ-32A IV, V	100-550 kg/h			11 kW	1280 x 950 x 1600	320 kg
IV = Mild Steel, V = Stainless Steel						

WF Series Fine Mill

Application:

Applied for materials within the pharmaceutical, chemical and foodstuffs industries. This unit can be used for medium and small batch production or sample test laboratory milling requirements.

Operating Principle:

The operating principle is the hammer type with high speed and applied for reduction of materials with medium hardness and viscosity. The material is fed into the milling chamber via a hopper and reduced by high speed rotating hammers. The machine milling chamber is easy to assemble and clean, has a simple structure while being made of stainless steel. The complete machine meets manufacturing hygienic requirements.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Rotor Speed	Motor Power	Overall Dimension	Weight
WF–130 IV, VI	5-30 kg/h	≤2 mm	80-400 mesh	13900 r/min	1.5 kW	400 x 500 x 850	90 kg
WF–180 IV, VI	30-80 kg/h			10000 r/min	2.38 kW	850 x 800 x 1126	200 kg
WF–250 IV, VI	50-100 kg/h			6500 r/min	5.5 kW	550 x 650 x 1400	280 kg
WF–350 IV, VI	80-300 kg/h	≤3 mm		5800 r/min	11 kW	600 x 700 x 1480	320 kg
WF–450 IV, VI	100-500 kg/h			4500 r/min	15 kW	800 x 900 x 1550	550 kg
WF–650 IV, VI	300-1000 kg/h	≤5 mm		3800 r/min	22 kW	900 x 950 x 1880	680 kg
WF–850 IV, VI	500-2500 kg/h			2500 r/min	37 kW	1100 x 1000 x 2000	1200 kg
IV = Mild Steel, V = Stainless Steel							

WF Series Fine Milling/Filter Collector Unit

Application:

Applied for applications such as pharmaceutical, chemical and foodstuff etc. This machine is a new generation fine milling combination and collection design.

Operating Principle:

This machine is a hammer milling type operating at a high speed. The material is fed into the milling chamber through a hopper by a conveyor and reduced by high speed rotating hammers. The milled material enters the filter automatically under the effect of rotating centrifugal force and the dust is filtered and recovered by the dust collector through a system designed according to the GMP standards.

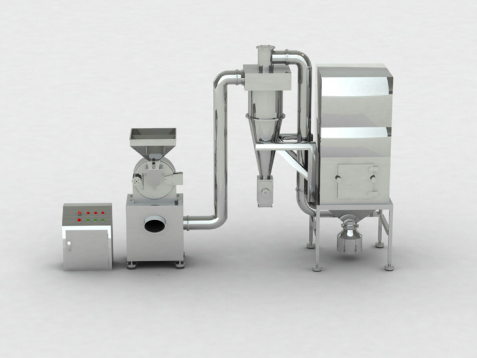
Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Main Motor	Feeding Motor	Dust Collector Motor	Fine Miller Dimension	Dust Collector Dimension	Weight
WF–180 IV, VI	30-80 kg/h	≤1 mm	80-400 mesh	2.2 kW	0.18 kW	1.5 kW	850 x 600 x 1350	550 x 550 x 1350	320 kg
WF-320 IV, VI	100-300 kg/h	≤5 mm		11 kW			1150 x 600 x 1900	600 x 550 x 1350	450 kg
IV = Mild Steel with Water Cooler, VI = Stainless Steel with Water Cooler									

WF Series Cyclone Pulse Filter Collecting Fine Mill

Application:

Is widely used within the pharmaceutical, chemical, foodstuff, magnetic material and powder industries. This new generation type milling equipment combines both milling and filter collecting and continuous discharge into a receiving station.



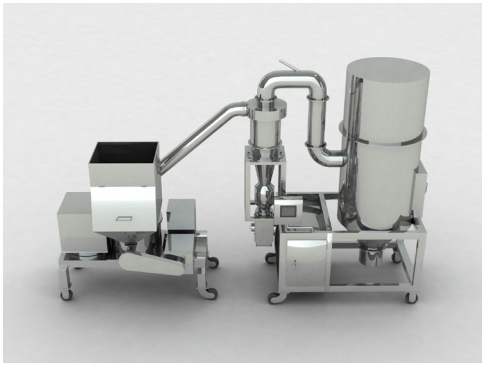
Operating Principle:

This machine is made up of a mill, cyclone separator; pulse cleaner and pneumatic fan etc. material is fed into a chamber through the hopper and reduced by high speed rotating hammers. The finished material flows into the cyclone separator by the induced fan and rotating centrifugal force, then discharged through a rotary valve. Fine material passes to the pulse dust- collector to be filtered and the cleaned air is recycled by the filter socks. The particle size can be adjusted by the screen size .It is designed to GMP standards and the complete machine is made from stainless steel and also meets the hygiene process operating standards.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Main Motor	Dust Collector Motor	R/V Discharge Motor	Overall Dimension	Weight
WF-250 IV, VI	50-100 kg/h	≤5 mm	80-400 mesh	5.5 kW	2.2 kW	0.75 kW	3000 x 880 x 2350	580 kg
WF-350 IV, VI	80-300 kg/h			11 kW	3 kW		3550 x 880 x 2350	800 kg
WF-450 IV, VI	100-500 kg/h			15 kW	4 kW		4200 x 880 x 2350	1200 kg
WF-650 IV, VI	300-1000 kg/h			22 kW	5.5 kW	1.5 kW	6560 x 1100 x 2480	2000 kg
WF-850 IV, VI	500-2500 kg/h			37 kW	11 kW	2.2 kW	7800 x 1100 x 2480	3000 kg
IV = Mild Steel, V = Stainless Steel, VI = Stainless Steel with Water Cooler								

WFJ Series Fine Milling/Filter Collector Set



Application:

Is comprised of a main frame, auxiliary machine set and electrical control cabinet. This milling arrangement provides for processing specifications of uniform size and continuous operation and reaches the international advanced level being widely used for material standards in pharmaceutical, chemical and foodstuff processing applications.

Operating Principle:

Material is fed into the milling chamber by a screw conveyor to be ground by high speed rotating blades and then conveyed to the cyclone separator by means of negative pressure air conveyance before being discharged by the bag type collector. The dust is filtered and recovered in the dust collector through filter sleeves with the clean air exhausting to the atmosphere.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Total Power	Rotor Speed	Overall Dimension	Weight
WFJ-15 IV, V, VI	10-100 kg/h	≤10 mm	60-450 mesh	13.5 kW	5800 r/m	4200 x 1200 x 2700	1000 kg
WFJ-20 IV, V, VI	50-250 kg/h			19.3 kW	5200 r/min	4300 x 1350 x 2700	1500 kg
WFJ-36 IV, V, VI	80-500 kg/h			39.05 kW	5000 r/min	7920 x 1480 x 3290	2500 kg
WFJ-60 IV, V, VI	200-1500 kg/h			75.3 kW	4500 r/min	9500 x 1800 x 3730	3200 kg
IV = Mild Steel, V = Stainless Steel							

GF Series Filter Collector/Milling Unit

Application:

This mill is suited to applications within the pharmaceutical, foodstuff, chemical and associated industries and is specially used for high fibre materials and high oil content material milling applications

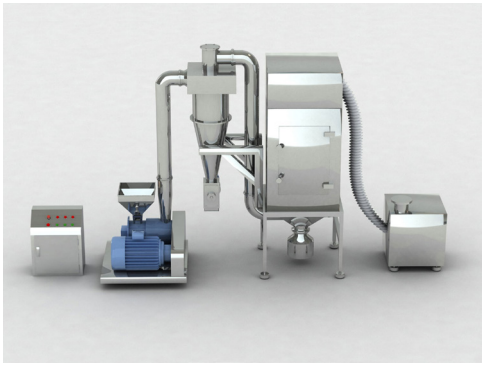
Operating Principle:

This machine is made up of main mill, cyclone separator, pulse dust-collector and pneumatic conveying system. Material is fed into the chamber through the hopper and is milled by high speed rotating hammers. The particle size can be adjusted by screen aperture. The milled material flows into the cyclone separator by the induced fan and through rotating centrifugal force, and is then discharged through the blower. Dust material enters the pulse dust-collecting filtered where the air is recycled. The filter is designed to GMP standards, and the complete unit is made of stainless steel and there are no dust emissions from the process.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Main Motor	Dust Collector Motor	Output Motor	Overall Dimension	Weight
GF-250 IV, V, VI	50-150 kg/h	≤6 mm	60-200 mesh	5.5 kW	2.2 kW	0.75 kW	3000 x 880 x 2150	550 kg
GF-350 IV, V, VI	80-500 kg/h			11 kW	4 kW		3500 x 880 x 2150	880 kg
GF-450 IV, V, VI	100-600 kg/h	≤10 mm		22 kW	5.5 kW		4500 x 880 x 2250	1500 kg
GF-650 IV, V, VI	150-1200 kg/h	≤12 mm		37 kW	11 kW	1.5 kW	6580 x 1100 x 2380	2000 kg
GF-850 IV, V, VI	200-2000 kg/h	≤15 mm		55 kW	15 kW		7800 x 1100 x 2380	2800 kg
IV = Mild Steel, V = Stainless Steel, VI = Stainless Steel with Water Cooler								

YF Series Cyclone Separator/Filter Collector Milling Unit



Application:

This unit is suitable for incorporation within the pharmaceutical, food, chemical applications. With no limit to the viscosity, hardness and fibre content of the material, it is also provided with air cooling and is screen-free. It has a very good pulverisation effect on any material type and is especially suitable for fibrous Chinese herbs or oily materials.

Operating Principle:

This machine is made up of a feed hopper, classifier assembly, air swept pulveriser, pulveriser drive motor, receiving cyclone and filter collector. The material is fed into the pulveriser chamber through the feed hopper and pulverised by the rotating attrition unit. The fineness of the material is controlled by the adjustment of the gap between stepped gear and impact ring assembly. The air swept design classifier recycles the coarse fraction material to return to the milling chamber where it under goes further particle size reduction. Material which has been milled to the required particle size transfers to the receiving cyclone and filter collector for discharge. All contact parts are manufactured from stainless steel and the machine has features of convenient operation, low noise and easy maintenance.

Technical Parameters:

Model	Capacity	Feed Size	Milling Fineness	Main Motor	Dust Collector Motor	Output Motor	Overall Dimension	Weight
YF-130	5-30 kg/h	≤5 mm	20-200 mesh	1.5 kW	1.5 kW	0.75 kW	1500 x 650 x 1500	250 kg
YF-300	30-300 kg/h	≤10 mm		11 kW	3 kW		4000 x 850 x 2350	850 kg
YF-500	60-500 kg/h	≤12 mm		22 kW	5.5 kW		4900 x 950 x 2450	1200 kg
YF-600	80-800 kg/h	≤15 mm		37 kW	11 kW		5500 x 950 x 2500	2500 kg
IV = Mild Steel, V = Stainless Steel, VI = Stainless Steel with Water Cooler								

WFM Series Super Fine Vibrating Mill

Application:

Used for super fine milling of fibre material in a wide range of applications including glossy ganoderma, liquorice, shrimp shell and every kind of bone and plant fibre. With the milling fineness reaching micron grade, this machine has reached an international advanced level for ultra-fine milling requirements.

Operating Principle:

This machine is a horizontal vibrating mill where the material is fed into the milling chamber through a hopper and is reduced through collision and grinding with grinding bars inside the chamber under the effect of vibration. It is equipped with a water cooling unit to control the temperature inside the milling chamber. It is designed to GMP standards and is made from stainless steel. This equipment can be operated under controlled conditions without dust emission or environmental pollution.

Technical Parameters:

Model	Working Volume	Capacity	Milling Fineness	Cooling Type	Power	Overall Dimension	Weight
WFM-10 IV, V	10 L	2-2.5 kg	200-1800 mesh	Water Cooling	15 kw	1200 x 800 x 1400	580 kg
WFM-50 IV, V	50 L	10-30 kg/h			7.5 kw	1700 x 900 x 1700	1500 kg
WFM-100 IV, V	100 L	20-60 kg/h			11 kw	2850 x 1200 x 1800	2800 kg
IV = Mild Steel, V = Stainless Steel							

QS-100 Jet Mill

Application:

This mill is applied for pharmaceutical, chemical, foodstuff, minerals, pesticides, paint, fuel, new ceramic, magnetic and other brittle material ultra-fine milling and is especially suited for small businesses experimenting quantity and variety productions.

Operating Principle:

The machine operates using compressed gases and the initial material is delivered from the automatic feeder into the mill evenly and continuously where the pulverising nozzles at the periphery of the pulverising chamber force compressed gas from high-speed air flow nozzles into the pulverising chamber making powder particles impact and rub against each other. Following milling, the ultra-fine particles are collected into the filter collector and the air discharges through the filter socks. This machine is a simple structure, small volume and easy cleaning.

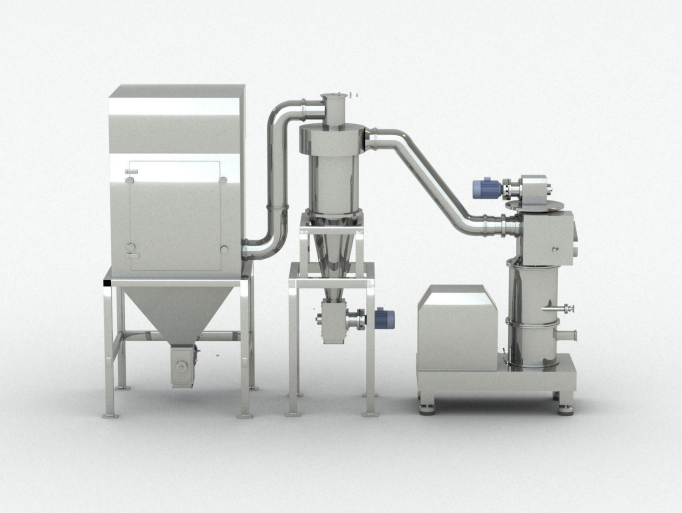
Technical Parameters:

Model	Grinding Pressure	Feed Pressure	Air Volume	Handling Capacity	Milling Fineness	Output Motor	Overall Dimension	Weight
QS-100	0.6-0.9 MPa	0.6-0.9 MPa	11-155 m^3/min	2-10 kg	300-2000 mesh	13-15 kW	1320 x 620 x 1600	140 kg

JCFJ Series Classifying Pulveriser

Application:

The JCFJ Series Classifier Pulveriser is suited for applications requiring a controlled finished particle size within an even distribution curve. In operation the classifier function controls the particle size without over grinding. The Pulveriser is suitable for dry milling and grading of all types of organic and mineral materials with wide use within the chemical, metallurgy, mining, energy, electronics, medicinal, pesticide, plastics, paper manufacturing, pigment and paint manufacturing, dyestuffs, cosmetics and food industries.



Operating Principle:

Material is conveyed by a metering feeder to the milling chamber for particle size reduction with the fine fraction being classified for transfer to the receiving cyclone while the coarse fraction is transferred to the impact milling chamber for further size reduction. Milled material is re-classified for separation of the fine fraction until the required finished product specification is achieved. The finished milled product is discharged from the receiving cyclone and following filter collector.

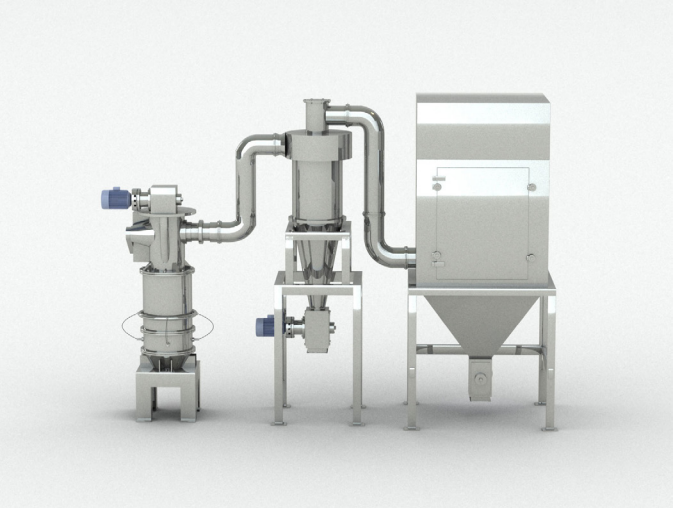
Features:

The significant feature of this type of pulveriser is the classification function where material already at the required particle size is classified off without having to transfer to the milling chamber. This function increases the grinding efficiency and conserves energy. Other features include the capability of handling very hard materials, easy adjustment for the finished particle size, simple operation, fully enclosed grinding chamber and stable and reliable performance with no emissions.

Technical Parameters:

Model	JCFJ-400	JCFJ-600	JCFJ-1000
Feed Size	≤5 mm	≤10 mm	≤15 mm
Milling Fineness	200-1000 mesh		
Mill Motor Power	11 kW	30 kW	75 kW
Grader Motor Power	7.5 kW	11 kW	15 kW
Draught Motor Power	15 kW	30 kW	45 kW
Rotary Valve Motor Power	0.75 kW	1.5 kW	2.2 kW
Rotor Speed	5600 r/min	3550 r/min	2250 r/min
Rotating Speed of Grading Wheel	6000 r/min	4000 r/min	2400 r/min
Production Capacity	100-500 kg/h	200-1000 kg/h	500-3000 kg/h
Fan Volume	1200 m^3/h	2400 m^3/h	6000 m^3/h
Fan Pressure	~1300 MPa	~1300 MPa	~1200 MPa
Overall Dimension	5000 x 1200 x 2400	6000 x 1200 x 2400	8000 x 1500 x 2400
Weight	1200 kg	2000 kg	5700 kg

QLDJ Series Fluidised Jet Mill



Application:

The QLDJ Series Fluidised airflow Jet Mill is the largest super fine fluidised milling machine. It combines the manifold nozzle tube technology, fluidised-bed technology and horizontal grading technology and mechanical integration. It represents the developing trend of jet milling. The super-fine powder made by this machine is widely used in the pharmaceutical, chemical, mine energy, electronics, medicinal, pesticide, plastic, paper manufacturing, pigment, paint manufacturing, dyestuff, grinding paste food and cosmetic industries. It can also be used to grind high pure product such as polymer material, advanced electromagnetic material, magnetic material, semiconductor material, fine chemical, powder, catalyser, reagent, chemicals and activator etc.

Operating Principle:

The Fluidised airflow jet Mill consists of an air supply unit, grinding unit, powder grading and powder collecting facility. The compressed air from the air supply unit mixes with the particles from the feeding unit in the grinding chamber and forms the air solid phase flow. The supersonic airflow generated by the ejectors causes the particles to collide and impact into each other. Those particles then reach the required fineness and are released by the grading unit on the top of the machine. They are collected and packed by the collecting unit.

Features:

This machine has many advantages such as high-speed flow rate, high grading efficiency, low energy consumption, little material waste, capable of grinding material of great hardness, easy to adjust the fineness of the powder, easy operation, fully sealed chamber, wide application (can be used to grind heat sensitive material), stable and reliable operation.

Technical Parameters:

Model	QLDJ-300	QLDJ-400	QLDJ-630
Feed Size	100 mesh		
Product Size	2-100 μm	5-120 μm	6-150 μm
Grinding Pressure	0.65-0.95 MPa		
Power of Grading Wheel	4 kW	7.5 kW	11 kW
Speed of Grading Wheel	8000 r/min	6000 r/min	4000 r/min
Air Flow	10-13 m^3/min	20-25 m^3/min	40-50 m^3/min
Capacity	30-250 kg/h	100-500 kg/h	200-1000 kg/h
Total Power of System	90-110 kW	160-180 kW	300-360 kW
Overall Dimension	942 x 612 x 1438	107 x 782 x 1719	1416 x 1077 x 2112
Weight	330 kg	400 kg	752 kg

JM Series Two-Stage Colloid Mill

Application:

This machine is applied for wet material, super fine particle reduction in the pharmaceutical, foodstuff, chemical and other industries suitable for emulsifying, mixing and milling all kinds of semi-moist or emulsion materials. Its main technical parameters meet international advanced standards.

Operating Principle:

With its rotating and fixed milling stones with different geometrical shapes rotating at high speed, this machine mills materials by cutting, pulverising and high frequency attrition. There are two stages of pulverising with the first one for fine pulverising and the second for super-fine pulverising. The pulverising fineness can be adjusted by changing the gap between the upper and lower stones. It can achieve the required effect of super-fine pulverising in a single pass. It is featured with compact conformation, steady running, low noise, corrosion resistant, easy cleaning, convenient maintenance etc. It is the ideal equipment for wet pulverising of a wide range of material types.

Range of Applications

Foodstuff Industry:
Aloe Vera, dried flower petals, pineapple, ginger, ice cream, jam, syrup, soy bean, grass milk, soy milk, dairy products, malted milk, essence, drinks, emulsified chicken bones, etc.

Chemical Industry:
Oil, paint, dye, coloring matter, pastes, lubrication grease, diesel oil, petrol activator, emulsified bitumen, adhesive, scouring compounds, plastic, glass steel, emulsified detonator etc.

Health/Chemistry:
Toothpaste, shampoo, shoeshine, cosmetics, bath extractive, soap, hand creams etc.

Pharmaceutical Industry:
Medical syrups, nutrition compounds, Chinese patent medicine, poultice compounds, biology produce, fish liver oil, pollen, queen bee plasma, bacteria, ointments, liquid tonics, spasmolytic, pancreas and enzyme preparation, emulsion and creams.

Construction Industry:
Sealants including inside and outside wall types, waterproofing compounds, porcelain compounds, colorful sealants , pastel pottery and porcelain, enamel compounds etc.

Other Industries:
Plastic industry, weave industry, paper industry, biological, chemical, environmental protection, economization on energy, coal floatation, universities, scientific research institutes etc.

Technical Parameters:

Model	JM-50	JM-100	JM-150	JM-200	JM-250	JM-300	JM-350	JM-450
Emulsification Fineness single loop or multi cycle	2-50μm							
Adjustment Range	1-0.01 mm							
Production Capacity	0.01-0.3 t/h	0.5-2 t/h	0.8-5 t/h	2-7 t/h	4-15 t/h	6-20 t/h	8-30 t/h	10-40 t/h
Motor Power	1.5 kW	5.5 kW	11 kW	18.5 kW	37 kW	55 kW	75 kW	110 kW
Motor Rotating Speed	4500 r/min					4000 r/min		3500 r/min
Grinding Disc dia.	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm	350 mm	450 mm
Discharge Gate dia.	15 mm	32 mm	40 mm	65 mm	75 mm	85 mm	85 mm	90 mm
Feed Inlet dia.	32 mm	50 mm	80 mm	120 mm	140 mm	159 mm	159 mm	168 mm
Water Cooling Tube dia.	1/8"	1/4"						
Overall Dimension	750 x 400 x 810	1060 x 500 x 1080	1100 x 520 x 1250	1200 x 560 x 1420	1500 x 700 x 1600	1800 x 900 x 2000	2100 x 1100 x 2000	2500 x 1400 x 2300
Weight	100 kg	275 kg	525 kg	650 kg	1300 kg	1600 kg	2200 kg	3000 kg

FYF Series Fruit and Vegetable Blending Machine

Application:

The machine is suitable for fruit and vegetable food processing applications and is used for restaurants, canteen in large scale enterprises and food factories. The machine slices fresh fruit and vegetable, into mashed and reduced particle form such as garlic, ginger, vegetables, fresh chili and fruits.

Operating Principle:

The machine is made up of a material barrel, cutting knives, sealing assembly, frame, and motor and driving shaft. The motor is installed up to the barrel and the driving shaft is directly located within the product barrel. There are two blades on the top of the shaft and the blades are installed as a X form so there is no dead angle and to improve efficiency. The blades are made of high quality stainless steel and are heat treated for long life and optimum sharpness. The sealing arrangement between the driving shaft and material barrel is made of silicon rubber. All component parts are made of food grade stainless steel while the operation is simple and convenient.

Technical Parameters:

Model	Barrel Volume	Feed Volume	Motor Power	Spindle Speed	Overall Dimension	Weight
FYF-10	10 L	5 L	0.37 kW	2800 r/min	350 x 290 x 750	25 kg
FYF-30	30 L	15 L	1.5 kW	2800 r/min	460 x 450 x 1080	40 kg

2. SCREENERS

ZS Series High Efficiency Screeners

Application:
This machine is applied for continuous screening of powder and granular materials within the pharmaceutical, chemical, foodstuff, agriculture and related industries.

Operating Principle:
Comprised of a vertical out of balance vibration motor drive assembly, screen base, mesh frame, screening chamber and rubber vibratory isolation arrangement. This can be used either for single layer or multilayer grading and sifting and features a compact structure, convenient handling and maintenance, stable operation, low noise, compact size and heavy duty fabrication.

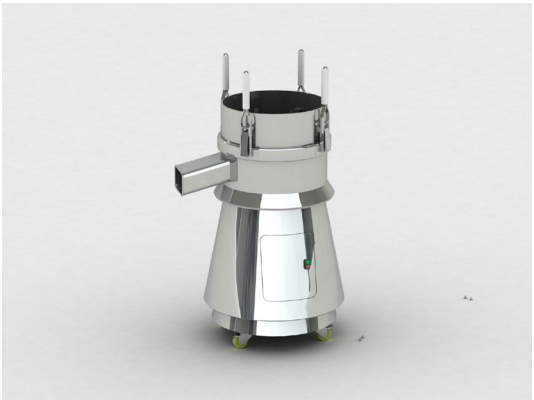
Technical Parameters:

Model	Capacity	Output Size	Rotor Speed	Motor Power	Overall Dimension	Weight
ZS-400	40-500 kg/h	2-200 mesh	1500 t/min	0.4 kW	600 x 500 x 1100mm	200 kg
ZS-600	200-1500 kg/h				800 x 700 x 1150mm	250 kg
ZS-800	200-1200 kg/h			0.75 kW	1100 x 950 x 1150mm	300 kg
ZS-1000	500-3500 kg/h			1.1 kW	1200 x 1100 x 1250mm	380 kg
ZS-1200	800-5000 kg/h			1.5 kW	1380 x 1300 x 1280mm	450 kg

ZS Series Vibrating Screener

Application:
ZS series screener is applied for continuous screening of powder and granulates within the pharmaceutical, chemical, foodstuff, agriculture and related industries.

Operating Principle:
This machine is comprised of an inlet hopper, vibrating drive, screen frame assembly, coupling and motor. The vibrating screen frame assembly is fitted up to the vibratory motor spindle and bearing. When eccentric weight is conveyed to the centerline of the spindle through the motor drive, it generates centrifugal force under an unbalanced state by which material is forced to form regular eddies inside. The amplitude of the weight adjustment can be regulated according to different materials and screens. The machine features a compact structure, high productivity, low noise, low energy consumption and convenient operation and maintenance.



Technical Parameters:

Model	Capacity	Mesh Screen Size	Motor Power	Spindle Speed	Overall Dimension	Weight
ZS-350	60-500 kg/h	2-200 mesh	0.55 kW	1390 r/min	560 x 560 x 1050	100 kg
ZS-515	100-1300 kg/h		0.75 kW	1400 r/min	710 x 710 x 1280	180 kg
ZS-650	200-2500 kg/h		1.5 kW	1410 r/min	900 x 900 x 1350	250 kg

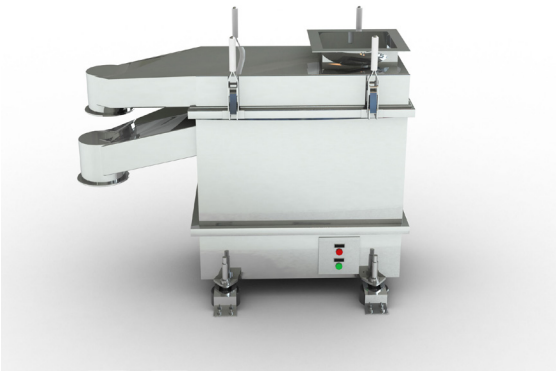
ZS Series Vibrating Rectangular Screener

Application:

Designed and engineered with advanced technical features and to meet GMP standards, this machine is widely used for grading and screening of a wide range of material types.

Operating Principle:

This machine is comprised of a screen box, vibration drive and damper arrangement. The vibrating frame and screen box are connected with isolation rubber dampers fixed to the screen frame. Centrifugal force is generated from the out of balance vibratory drive to impact a screening motion to the screen box. Up to four separations may be arranged according to requirements.



Technical Parameters:

Model	Working Volume	Capacity	Milling Fineness	Cooling Type	Power	Overall Dimension	Weight
ZS-0.3 m^2	50-300 kg/h	3-150 mesh	0.2 kW	1400 r/min	0-2.5 kW	1110 x 500 x 900	150 kg
ZS-0.5 m^2	100-450 kg/h					1250 x 660 x 990	250 kg
ZS-07 m^2	200-650 kg/h					1780 x 650 x 960	280 kg
ZS-0.8 m^2	300-750 kg/h		0.3 kW			1500 x 800 x 900	320 kg
ZS-1.2 m^2	500-1100 kg/h		0.5 kW			1980 x 1050 x 990	400 kg
ZS-1.8 m^2	800-1600 kg/h		0.75 kW			2400 x 1200 x 1500	600 kg
ZS-2.2 m^2	1000-2500 kg/h					2800 x 1200 x 1600	800 kg

LXS Series Centrifugal Screener

Application:

An ideal screening machine used in pharmaceutical, chemical, and the foodstuff industries. This screener is particularly significant for screening high fibre, high viscosity, and high humidity, electrostatic and clammy type of products.

Operating Principle:

Material is fed into the screen zone via a metering feed screw conveyor, where through centrifugal action the fine material passes through the screen aperture and the coarse fraction passes to over tail.

Technical Parameters:

Model	Capacity	Feed Size	Output Size	Motor Power	Overall Dimension	Weight
LXS-250	60-800 kg/h	20-300 mesh	5.5 kW	960 r/min	1800 x 550 x 1600	250 kg
LXS-350	200-1800 kg/h		7.5 kW	1200 r/min	1900 x 550 x 1700	380 kg

3. MIXERS

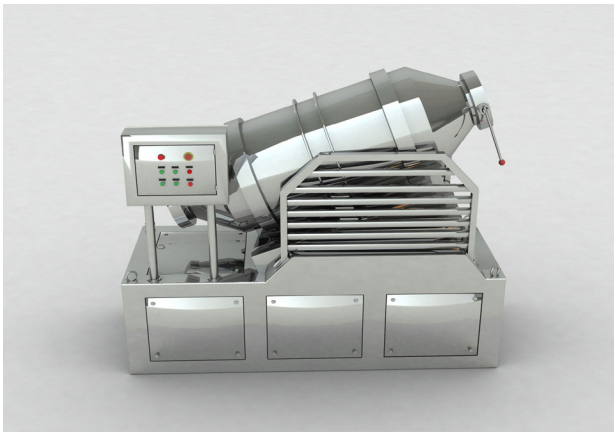
EYH Series 2D Motion Mixer

Application:

This type of mixer is suitable for the mixing of dry, powder and granule materials for the pharmaceutical, chemical industries etc. and especially for the mixing of materials with high moisture content and a wide particle size distribution.

Operating Principle:

The mixing unit is a cylinder shaped barrel without any devices inside. Rotation is maintained via a trunion wheel arrangement where the relative drum position may be adjusted according to requirements.



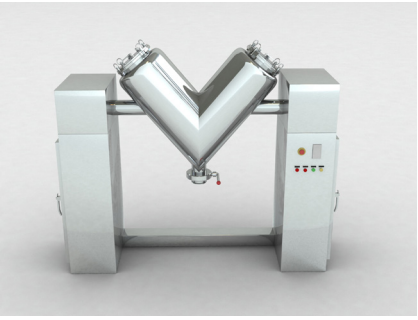
Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	No. of Rotation	No. of Swing	Rotation Motor Power	Swing Motor Power	Overall Dimension	Weight
EYH-50	50 L	25 L	25 kg	0-99 min	20 r/min	11.5 r/min	0.55 kW	0.75 kW	900 x 730 x 950mm	115 kg
EYH-100	100 L	50 L	50 kg				0.75 kW	1.1 kW	1365 x 810 x 1150mm	190 kg
EYH-150	150 L	75 L	75 kg				1.1 kW		1650 x 950 x 1250mm	210 kg
EYH-200	200 L	100 L	100 kg			7.5 r/min			1850 x 1000 x 1340mm	285 kg
EYH-300	300 L	150 L	150 kg		17 r/min				1800 x 1050 x 1450mm	340 kg
EYH-400	400 L	200 L	200 kg		15 r/min				1950 x 1140 x 1550mm	545 kg
EYH-600	600 L	300 L	300 kg					1.5 kW	1990 x 1300 x 1650mm	1150 kg
EYH-800	800 L	400 L	400 kg		12 r/min		1.5 kW		2100 x 1350 x 1710mm	1600 kg
EYH-1000	1000 L	500 L	500 kg					2.2 kW	2500 x 1500 x 1850mm	1700 kg
EYH-1500	1500 L	750 L	750 kg		10 r/min		3 kW	4 kW	2630 x 1670 x 2050mm	2000 kg
EYH-2000	2000 L	1000 L	1000 kg		8 r/min	5 r/min	4 kW		2840 x 1780 x 2170mm	2600 kg
EYH-3000	3000 L	1500 L	1500 kg		6 r/min		5.5 kW	5.5 kW	3200 x 2100 x 2550mm	3500 kg
EYH-4000	4000 L	2000 L	2000 kg		5 r/min	3.7 r/min	7.5 kW	11 kW	3670 x 2560 x 2980mm	4100 kg
EYH-6000	6000 L	3000 L	3000 kg				7.5 kW		4500 x 3900 x 3500mm	6100 kg
EYH-8000	8000 L	4000 L	4000 kg		4 r/min		11 kW	15 kW	5000 x 3300 x 4000mm	7900 kg
EYH-10000	10000 L	5000 L	5000 kg		3 r/min			18.5 kW	5300 x 3800 x 4400mm	9500 kg

CH-V Series High Efficiency Mixer

Application:

This machine is used for the mixing of dry powder and granulate materials in the pharmaceutical, foodstuff, chemical and other industries.



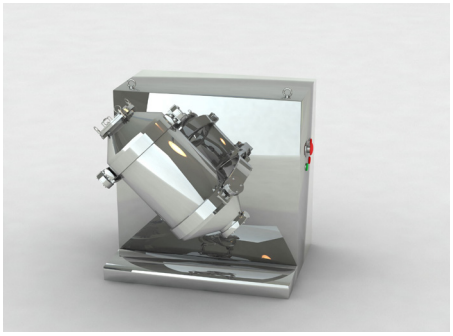
Operating Principle:

The rotating V shaped mixing assembly is loaded via the top hatches and the mixing action is maintained through the interaction of the material within the chamber while rotating to produce a backwards and forwards motion. The discharge is from the outlet butterfly valve.

Technical Parameters:

Model	Model of Auxiliary Vacuum Pump	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Motor Power	Barrel Speed	Overall Dimension	Weight
CH-50 V	W 2	50 L	20 L	20 kg	0- 99 min	0.75 kW	20 r/min	1250 x 450 x 1060	160 kg
CH-100 V		100 L	40 L	40 kg		1.1 kW	15 r/min	1620 x 500 x 1480	220 kg
CH-200 V		200 L	80 L	80 kg				1800 x 600 x 1850	280 kg
CH-300 V		300 L	120 L	120 kg			12 r/min	1900 x 650 x 1850	320 kg
CH-500 V		500 L	200 L	200 kg		2.2 kW		2500 x 800 x 2050	550 kg
CH-1000 V	W 3	1000 L	400 L	400 kg		4 kW	10 r/min	2850 x 1050 x 2050	950 kg
CH-1500 V		1500 L	680 L	680 kg		5.5 kW		3400 x 1100 x 3200	1200 kg
CH-2500 V		2500 L	1200 L	1200 kg		11 kW	8 r/min	3820 x 1100 x 3200	2040 kg
CH-4000 V	W 4	4000 L	1800 L	1800 kg		15 kW	6 r/min	4600 x 1300 x 3500	2800 kg
CH-6000 V		6000 L	2500 L	2500 kg		18.5 kW	5 r/min	5500 x 1300 x 4380	3200 kg

SWH Series 3D Motion Mixer



Application:

This machine is applicable for mixing powders and granulate material in the pharmaceutical, chemical, foodstuff, lighting, electronic, mining, metallurgy and scientific research industries.

Operating Principle:

This machine incorporates a base mounted governing motor shaft, rotary connection assembly and barrel unit. The material barrel is driven by the positive shaft to develop a complex movement including horizontal, vertical and rolling motions etc. which causes the material to move in three directions along the barrel for highly uniform mixing of various material types. This machine is a fully enclosed, high efficiency, energy saving mixer. When the material is being mixed, no centrifugal force applies and gravity segregation and laminar accumulation does not occur. In addition, it has larger loading capacity, short mixing time and high efficiency

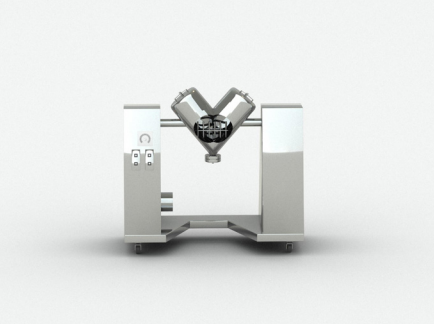
Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Motor Power	Barrel Speed	Overall Dimension	Weight
SWH-10	10 L	7 L	7 kg	0-99 min	0-22 r/min	0.18 kW	640 x 650 x 55	150 kg
SWH-25	25 L	18 L	18 kg		0-15 r/min	0.55 kW	900 x 900 x 75	150 kg
SWH-50	50 L	40 L	40 kg			0.75 kW	970 x 950 x 120	300 kg
SWH-100	100 L	75 L	75 kg			1.5 kW	1200 x 1600 x 1500	500 kg
SWH-200	200 L	160 L	160 kg			2.2 kW	1400 x 1800 x 1600	800 kg
SWH-400	400 L	320 L	320 kg		0-12 r/min	4 kW	1700 x 2100 x 1850	1200 kg
SWH-600	600 L	480 L	480 kg		0-15 r/min	5.5 kW	2100 x 2400 x 2250	1500 kg
SWH-800	800 L	640 L	640 kg		0-11 r/min	7.5 kW	2200 x 2500 x 2300	2000 kg
SWH-1000	1000 L	800 L	800 kg		0-10 r/min		2280 x 2600 x 2500	2500 kg
SWH-1200	1200 L	950 L	950 kg			11 kW	2400 x 2800 x 2250	2800 kg
SWH-1500	1500 L	1200 L	1200 kg			15 kW	2500 x 3100 x 2600	3000 kg
SWH-2000	2000 L	1600 L	1600 kg		0-9 r/min	18.5 kW	2800 x 3600 x 3200	3800 kg

CH-VI Series Forced-Type Agitator Mixer

Application:

Based on international advanced mixing technology and designed for optimum performance, the VI type forced mixer is used in pharmaceutical, foodstuff and the chemical industries. The mixing effect is achieved through the combination of the "V" shall and internal agitator action.



Operating Principle:

This machine can mix blends of relatively fine powder as well as agglomerates of materials with relatively high moisture content. The internal agitator refines and homogenises the material as this is blended within the "V" shell mixing action.

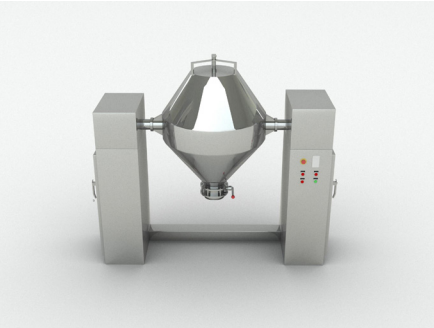
Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Motor Power	Barrel Speed	Agitation Speed	Overall Dimension	Weight
CH-300 VI	300 L	120 L	120 kg	0-99 min	1.1 & 2.2 kW	12 r/min	500 r/min	2100 x 650 x 1850	450 kg
CH-500 VI	500 L	200 L	200 kg		3 & 2.2 kW	12 r/min	500 r/min	2700 x 800 x 2050	480 kg
CH-1000 VI	1000 L	400 L	400 kg		5.5 & 2.2 kW	10 r/min	500 r/min	3000 x 1050 x 2450	950 kg
CH-1500 VI	1500 L	600 L	600 kg		7.5 & 3 kW	10 r/min	500 r/min	3600 x 1100 x 3100	1020 kg
CH-2000 VI	2000 L	850 L	850 kg		7.5 & 3 kW	10 r/min	350 r/min	4215 x 1280 x 3100	2000 kg
CH-2500 VI	2500 L	1200 L	1200 kg		11 & 4 kW	8 r/min	350 r/min	4260 x 1280 x 3200	2040 kg
CH-3000 VI	3000 L	1500 L	1500 kg		11 & 5.5 kW	8 r/min	350 r/min	4400 x 1300 x 3300	2500 kg
CH-4000 VI	4000 L	1800 L	1800 kg		15 & 5.5 kW	6 r/min	300 r/min	4800 x 1300 x 3800	3000 kg
CH-5000 VI	5000 L	2200 L	2200 kg		15 & 7.5 kW	5 r/min	300 r/min	5656 x 1300 x 4380	3500 kg
CH-6000 VI	6000 L	2500 L	2500 kg		18.5 & 7.5 kW	5 r/min	300 r/min	5650 x 1300 x 4380	3800 kg

W Series Double Cone Mixer

Application:

Suited to blending free flowing powders and granular products for consistent cv specification requirements and capable of short time mixing. The Double Cone series mixers are used for material mixing in such industries as pharmacy, foodstuff, chemical, plastics and foodstuff industries.



Operating Principle:

This machine can rapidly mix free flowing materials and materials with a certain water content. With a high mixing speed and good mixing effect, the mixing uniformity rate can reach over 95%. The design meets all GMP standards and these mixers have a simple structure, convenient operation and maintenance.

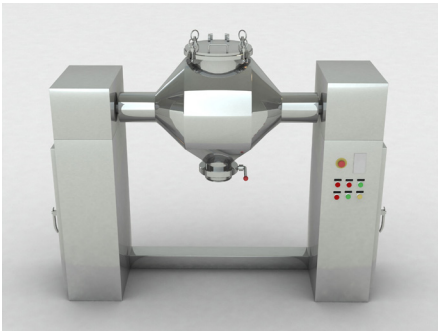
Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Motor Power	Barrel Speed	Overall Dimension	Weight
W-30	30 L	15 L	15 kg	0-99 min	0.37 kW	15 r/min	750 x 390 x 810	100 kg
W-100	100 L	50 L	50 kg		1.1 kW	15 r/min	1300 x 600 x 1400	310 kg
W-300	300 L	120 L	150 kg		1.1 kW	15 r/min	1580 x 650 x 1720	310 kg
W-500	500 L	2500 L	250 kg		3 kW	15 r/min	2010 x 800 x 2000	550 kg
W-1000	1000 L	500 L	500 kg		4 kW	12 r/min	2300 x 1050 x 2570	800 kg
W-1500	1500 L	750 L	750 kg		5.5 kW	12 r/min	2900 x 1300 x 2660	950 kg
W-2500	2500 L	1250 L	1250 kg		11 kW	12 r/min	3000 x 1300 x 3180	1650 kg
W-4000	4000 L	2000 L	2000 kg		15 kW	10 r/min	3200 x 1300 x 3600	1880 kg
W-6000	6000 L	3000 L	3000 kg		18.5 kW	10 r/min	3500 x 1300 x 3800	2350 kg
W-8000	8000 L	4000 L	4000 kg		22 kW	10 r/min	3980 x 1300 x 4300	2680 kg

CW Series Agitator Type Mixer

Application:

Developed for optimum mixing of agglomerated and variable particle size materials and based on the W series double cone mixer. This machine adds a stirring unit which can be used for material mixing in such industries as pharmacy, foodstuff, chemical and related industries.



Operating Principle:

This machine can rapidly mix free flowing materials and materials with a certain water content. With a high mixing speed and good mixing effect, the mixing uniformity rate can reach over 95%. The design meets all GMP standards and these mixers have a simple structure, convenient operation and maintenance.

Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Mixing Motor	Stirring Motor	Mixing Rotary Speed	Stirring Rotary Speed	Overall Dimension
CW-50	50 L	25 L	25 kg	0-99 min	1.1 kW	0.75 kW	20 r/min	60 r/min	1500 x 450 x 1200
CW-100	100 L	50 L	50 kg	0-99 min	1.5 kW	1.1 kW	20 r/min	60 r/min	1550 x 550 x 1350
CW-200	200 L	100 L	100 kg	0-99 min	2.2 kW	1.1 kW	20 r/min	60 r/min	1800 x 700 x 1500
CW-300	300 L	150 L	150 kg	0-99 min	2.2 kW	1.1 kW	20 r/min	60 r/min	2100 x 760 x 1760
CW-500	500 L	250 L	250 kg	0-99 min	3 kW	2.2 kW	20 r/min	60 r/min	2320 x 950 x 1920
CW-1000	1000 L	500 L	500 kg	0-99 min	5.5 kW	2.2 kW	10 r/min	40 r/min	2450 x 1050 x 2500
CW-1500	1500 L	750 L	750 kg	0-99 min	7.5 kW	4 kW	10 r/min	40 r/min	2900 x 1300 x 2700
CW-2000	2000 L	1000 L	1000 kg	0-99 min	7.5 kW	4 kW	8 r/min	30 r/min	3000 x 1400 x 3100
CW-2500	2500 L	1250 L	1250 kg	0-99 min	11 kW	5.5 kW	6 r/min	20 r/min	3600 x 1400 x 3200
CW-3000	3000 L	1500 L	1500 kg	0-99 min	11 kW	5.5 kW	6 r/min	20 r/min	4000 x 1500 x 3500
CW-4000	4000 L	2000 L	2000 kg	0-99 min	15 kW	5.5 kW	6 r/min	20 r/min	4800 x 1300 x 3800
CW-5000	5000 L	2500 L	2500 kg	0-99 min	15 kW	7.5 kW	5 r/min	20 r/min	5400 x 1300 x 4000
CW-6000	6000 L	3000 L	3000 kg	0-99 min	17.5 kW	7.5 kW	5 r/min	20 r/min	5650 x 1300 x 4380

DLH Series Nauta Mixer

Application:

This is a new type high efficiency and high precision mixing machine which is widely used for mixing of powder or paste materials in the pharmaceutical and feed industries.

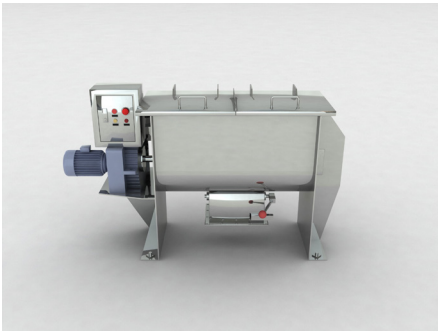
Operating Principle:

The machine consists of single screw and type S blades. It features a large agitating area with a high mixing speed and no dead areas. It is more suitable for mixing material with great disparity in specific weight and mixing characteristics. This machine is fabricated from stainless steel and is in compliance with GMP standard.

Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Motor Power	Barrel Speed	Overall Dimension	Weight
DLH-100	100 L	60 L	60 kg	0-99 min	2.2 kW	20-350 mesh	700 x 1400	300 kg
DLH-200	200 L	120 L	120 kg	0-99 min	3 kW	20-350 mesh	890 x 1930	600 kg
DLH-300	300 L	180 L	180 kg	0-99 min	3 kW	20-350 mesh	1010 x 1850	600 kg
DLH-500	500 L	300 L	300 kg	0-99 min	4 kW	20-350 mesh	1500 x 2290	800 kg
DLH-1000	1000 L	600 L	600 kg	0-99 min	5.5 kW	20-350 mesh	1500 x 2700	1200 kg
DLH-2000	2000 L	1200 L	1200 kg	0-99 min	11 kW	20-350 mesh	1900 x 3500	1800 kg
DLH-3000	3000 L	1800 L	1800 kg	0-99 min	15 kW	20-350 mesh	2120 x 400	2200 kg
DLH-4000	4000 L	2400 L	2400 kg	0-99 min	18.5 kW	20-350 mesh	2200 x 4050	2600 kg
DLH-5000	5000 L	3000 L	3000 kg	0-99 min	22 kW	20-350 mesh	2530 x 4300	3000 kg
DLH-6000	6000L	3600 L	3600 kg	0-99 min	30 kW	20-350 mesh	2850 x 4780	3500 kg

WLDH Series Horizontal Ribbon Mixer



Application:

The WLDH series Horizontal Ribbon mixer is a well proven product which ensures high efficiency mixing. It is widely used in the solid-solid (powder material) and solid –liquid (powder material & fluid material), mixing within the fields of the chemical, pharmaceutical and foodstuff industries.

Operating Principle:

WLDH series mixer is comprised of a mixing barrel, spiral ribbon and driving assembly. The spiral ribbon is made of two layers that are the inner ribbon which conveys the material to move outwards while the external ribbon conveys the material to move inwards. This forms an efficient circulation of material within the machine body; the ribbon mixer can achieve a rapid mixing efficiency in a very short period. These units are fabricated in stainless steel and complies with the GMP standards.

Technical Parameters:

Model	Barrel Volume	Loading Volume	Mixing Time	Stir Motor	Weight
WLDH-100	100 L	30-60 L	0-99 min	1.5-4 kW	320 kg
WLDH-300	300 L	100-180 L	0-99 min	3.5-5 kW	510 kg
WLDH-500	500 L	200-300 L	0-99 min	4-11 kW	920 kg
WLDH-1000	1000 L	400-600 L	0-99 min	7.5-15 kW	1450 kg
WLDH-1500	1500 L	600-900 L	0-99 min	11-18 kW	1950 kg
WLDH-2000	2000 L	800-1200 L	0-99 min	18.5-30 kW	3160 kg
WLDH-3000	3000 L	1200-1800 L	0-99 min	18.5-30 kW	3300 kg
WLDH-4000	4000 L	1600-2400 L	0-99 min	22-37 kW	3620 kg
WLDH-6000	6000 L	2400-3600 L	0-99 min	37-55 kW	5400 kg
WLDH-8000	8000 L	3200-4800 L	0-99 min	37-55 kW	6880 kg
WLDH-10000	10000 L	4000-6000 L	0-99 min	45-75 kW	7900 kg

CH Series Horizontal Single “Z” Arm Type Mixer

Application:

This stainless steel horizontal “Z” arm type mixer is widely used for mixing powdery or paste material in the pharmaceutical, chemical and foodstuff industries.

Operating Principle:

The” Z” type paddle is rotated through a mechanical driving action which pushes the material to turn repeatedly and mix uniformly. Operated with an electrical control, it can set the mixing time to automatic stop and the electric discharge operates thus improving the mix quality of each batch of material and reaching a high homogeneous finished mix blend.

Standard:

All contact parts are fabricated from stainless steel and the machine has a front tilt for discharge.

Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Mixing Motor	Stirring Motor	Mixing Rotary Speed	Stirring Rotary Speed	Overall Dimension	Weight
CH-30	Z Type single paddle	20 L	20 L	20 kg	24 r/min	<105°	0.75 kW	0.12 kW	1065 x 380 x 520	150 kg
CH-50	Z Type single paddle	30 L	30 L	30 kg	24 r/min	<105°	1.5 kW	0.18 kW	1265 x 430 x 720	200 kg
CH-100	Z Type single paddle	60 L	60 L	60 kg	24 r/min	<105°	2.2 kW	0.55 kW	1580 x 500 x 830	300 kg
CH-150	Z Type single paddle	90 L	90 L	90 kg	24 r/min	<105°	3 kW	0.75 kW	1685 x 600 x 1000	650 kg
CH-200	Z Type single paddle	140 L	140 L	140 kg	24 r/min	<105°	4 kW	0.75 kW	1850 x 600 x 1000	720 kg
CH-300	Z Type single paddle	180 L	180 L	180 kg	24 r/min	<105°	5.5 kW	1.1 kW	2160 x 700 x 1250	750 kg
CH-400	Z Type single paddle	250 L	250 L	250 kg	24 r/min	<105°	7.5 kW	1.5 kW	2280 x 700 x 1250	780 kg
CH-500	Z Type single paddle	300 L	300 L	300 kg	24 r/min	<105°	7.5 kW	1.5 kW	2450 x 700 x 1250	820 kg
CH-600	Z Type single paddle	380 L	380 L	380 kg	24 r/min	<105°	11 kW	2.2 kW	2500 x 900 x 1350	850 kg

WSH Series Double “Z” Arm Type Mixer

Application:

This machine is horizontal double “Z” arm type mixer which is widely used in pharmaceutical, chemical and foodstuff industries for mixing powder or paste material and especially for high viscosity and high density material.

Operating Principle:

The double “Z” type paddles provide a mixing action which is a combination of bulk movement, smearing, stretching, folding, dividing and re-combining as the material is pulled and squeezed against blades, saddle and side walls. The blades are pitched to achieve end to end circulation. All contact parts are in stainless steel and the machine has a front tilt for discharge. Features for automated operation are provided.

Technical Parameters:

Model	Barrel Volume	Max Loading Volume	Max Loading Weight	Mixing Time	Mixing Motor	Stirring Motor	Mixing Rotary Speed	Stirring Rotary Speed	Overall Dimension	Weight
WSH-100	100 L	70 L	70 kg	0-99 min	4 kW	0.75 kW	15 r/min	21 r/min	1750 x 560 x 1100	800 kg
WSH-200	200 L	140 L	140 kg	0-99 min	5.5 kW	1.1 kW	12 r/min	18 r/min	2060 x 660 x 1250	1000 kg
WSH-400	400 L	280 L	280 kg	0-99 min	7.5 kW	1.5 kW	12 r/min	18 r/min	2320 x 760 x 1500	1200 kg
WSH-500	500 L	350 L	350 kg	0-99 min	11 kW	2.2 kW	12 r/min	18 r/min	2500 x 760 x 1500	1300 kg
WSH-600	600 L	420 L	420 kg	0-99 min	15 kW	2.2 kW	12 r/min	18 r/min	2620 x 780 x 1620	1600 kg

4. GRANULATORS

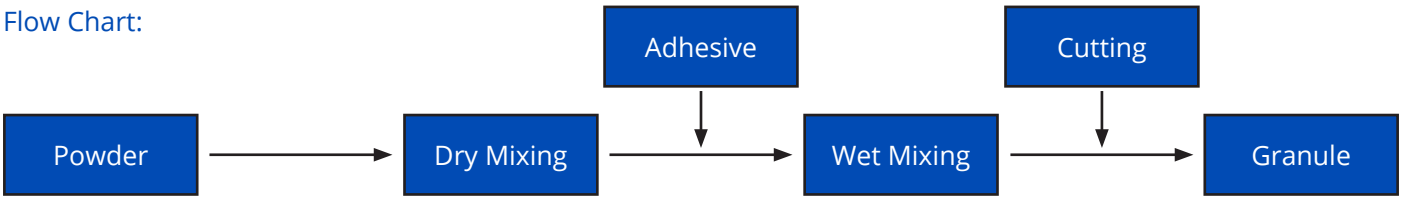
GHL Series High Speed Mixing Granulator

Application:
The GHL high speed mixing granulator is a high efficiency unit which can mix different types of powder material to granules in one procedure. It is widely used for pharmaceutical, foodstuff and chemical industry applications.

Operating Principle:
The powder material and adhesive are blended within the mixing chamber for transferring through the high speed cutting assembly to from uniform granules.

Features:
1. The machine incorporates a horizontal structure mixing arrangement for optimum efficiency.
2. The drive shaft is fitted with air purge seals for secure leak proof operation.
3. Granulation process incorporates fluidisation for efficient operation and flow ability with a reduced drying time required.
4. Compared with the traditional process, there is a saving of approx. 25% in binder required.
5. The time for mixing in the dry stage is 2 minutes and the time for granulating is 1 – 4 minutes. Compared with the traditional process which is 4 – 5 times longer.
6. All operations including dry mixing, liquid addition and granulation are performed under the GMP standards.
7. The complete operation has inbuilt safety and protective measures.
8. The mixing and cutting speeds are controlled through a frequency variator to enable the granule particle size to be regulated.

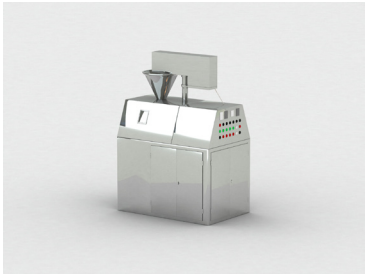
Flow Chart:



Technical Parameters:

Model	Capacity	Output	Admix Speed	Stir Motor	Incise Speed	Incise Power
GHL-50	50 L	15 kg/batch	200/400 rpm	5.5 kw	1500/3000 rpm	2.2 kw
GHL-150	150 L	50 kg/batch	180/270 rpm	15 kw	1500/3000 rpm	5.5 kw
GHL-200	200 L	80 kg/batch	180/270 rpm	15 kw	1500/3000 rpm	5.5 kw
GHL-250	250 L	100 kg/batch	180/270 rpm	15 kw	1500/3000 rpm	5.5 kw
GHL-300	300 L	130 kg/batch	140/220 rpm	18.5 kw	1500/3000 rpm	7.5 kw
GHL-400	400 L	200 kg/batch	106/155 rpm	22 kw	1500/3000 rpm	7.5 kw

GK Series Dry Granulator



Application:
This is a new generation unit that utilises the crystallised water within the material to pelletise the powder into granules. The machine features a novel and advanced design structure, has stable and reliable performance and is easy to maintain and clean. Granules made by the machine can be pressed into tablets or capsules and is mainly used for granulation in the pharmaceutical, chemical foodstuff and other related industries. It is especially used for granulation of materials not suitable for the wet granulation process.

Technical Parameters:

Model	Barrel Volume	Feeding Size	Working Pressure	Motor Power	Overall Dimension	Weight
GK-70	20-60 kg/h	0.4-6 mm	198 Pa	7.15 kW	1380 x 850 x 2200	1600 kg
GK-120	60-200 kg/h	0.4-6 mm	294 Pa	13.75 kW	1850 x 1100 x 2600	2000 kg
GK-250	80-300 kg/h	0.4-6 mm	294 Pa	25 kW	208 x 1240 x 2920	3000 kg

YK Series Reciprocating Granulator

Application:

Widely used in the pharmaceutical, chemical and foodstuff industries for producing various size granules from agglomerated and lumpy materials. These machines are ideal for preparing block and lump product ready for further incorporation into blends, mixes and solutions. Finish is in food grade stainless steel.

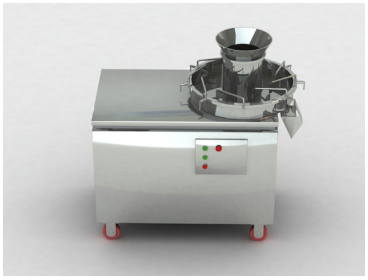
Operating Principle:

The reciprocating arm is fitted with either beaters, brushes or UHMW polyethylene paddles. The machine agitates against the fixed profiled screen which sizes the finished product according to aperture fitted. the high speed cutting assembly to from uniform granules.

Technical Parameters:

Model	Production	Granular Diameter	Motor Power	Drum Speed	Drum Diameter	Overall Dimension	Weight
YK-60	5-30 kg	0.8-5 mm	0.37 kW	46 r/min	Ø 60 mm	530 x 450 x 580	70 kg
YK-160	200-300 kg	0.8-5 mm	3 kW	55 r/min	Ø 160 mm	1000 x 800 x 1300	380 kg
YK-250	200-500 kg	0.8-5 mm	5.5 kW	38 r/min	Ø 250 mm	1050 x 890 x 1320	550 kg

ZL Series Rotating Granulator



Application:

The rotating granulator is the ideal equipment for applications within the pharmaceutical, foodstuffs, feedstuffs, chemical and solid beverage type industries and is especially for materials having a high viscosity. It operates continuously to produce an even and free form granulated finished product ready for further drying. The operation is simple and easily setup while the granulator incorporates stainless steel contact parts and hygienic operating features enabling easy cleaning.

Technical Parameters:

Model	Production	Granular Diameter	Motor Power	Overal Dimension	Weight	Knife Size
ZL-250	100-200 kg/h	1.0-3 mm	3 kW	700 x 540 x 1400	350 kg	250 mm
ZL-300	150-350 kg/h	1.0-3 mm	4 kW	800 x 650 x 1400	400 kg	300 mm

KZL Series High Speed Granulator

Application:

Widely used within the pharmaceutical, chemical and foodstuff industries with good effect. In operation, a rotating knife set operates against the set screen having the required aperture size. Material particle size smaller than the screen passes to the discharge while the larger particle size materials are reduced. All contact parts are made of food grade stainless steel and the design is to GMP standards.

Technical Parameters:

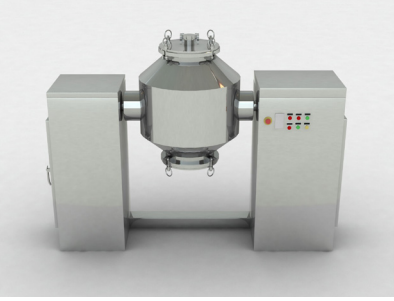
Model	Production	Spring Length	Diameter Screen Aperture	Motor Power	Speed	Overall Dimension	Weight
KZL-80	50-100 kg	185 mm	Ø 1-8 mm	0.55 kW	1500-3000 r/min	650 x 450 x 1000	48 kg
KZL-120	100-200 kg	185 mm	Ø 1-8 mm	1.1 kW	1000-1500 r/min	1000 x 8000 x 1200	150 kg
KZL-160	150-300 kg	185 mm	Ø 1-8 mm	1.5 kW	1000-1500 r/min	1060 x 850 x 1350	180 kg
KZL-200	200-400 kg	185 mm	Ø 1-8 mm	2.2 kW	800-1000 r/min	1100 x 100 x 1500	200 kg

5. DRYERS

SZG Series Double Cone Rotary Vacuum Dryer

Application:

The rotary vacuum dryers are mainly used for drying and mixing of material in the pharmaceutical and food industries.



Operating Principle:

This machine has a very good drying and mixing effect for heat sensitive, easy oxidising and non-crystalline materials as well as for solvent recovery in materials and drying strong irritating and toxic material. With a rapid drying speed and uniform product sample, there is no pollution within the material and the hygienic design ensures even blending and drying with the advantage of easy cleaning and simple maintenance.

Technical Parameters:

Model	SZG-30	SZG-50	SZG-100	SZG-350	SZG-500	SZG-750	SZG-1000	SZG-1500	SZG-2000	SZG-3000	SZG-4000
Total Volume	30 L	50 L	100 L	350 L	500 L	750 L	1000 L	1500 L	2000 L	3000 L	4000 L
Speed	10 r/min	10 r/min	6.5 r/min	6.5 r/min	6.5 r/min	6.5 r/min	6.5 r/min	6.5 r/min	6 r/min	5 r/min	4 r/min
Power	0.8 kW	0.8 kW	1.1 kW	1.5 kW	1.5 kW	1.5 kW	3 kW	3 kW	4 kW	5.5 kW	7.5 kW
Loading Coefficient	≤ 50%										
Heating Medium	Steam, Hot Water										
Working Pressure-Inner Tank	-0.8-0.1 MPa										
Working Pressure-Jacket	0.25-0.3 MPa										
Working Temperature-Inner Tank	≤ 80°C										
Working Temperature-Jacket	≤ 140°C										

RXH Series Hot Air Circulating Dryer

Application:

The RXH series is applied for drying and dehumidification of material in such industries as pharmaceutical, chemical, foodstuff, light, heavy industries etc., as well as heating and dehumidification of products including raw medicines, original medicines, traditional Chinese medicine tablet, powder, granulate materials, pigments, dyestuffs, dried vegetable, food, plastic resin, electric element and baking finish applications.

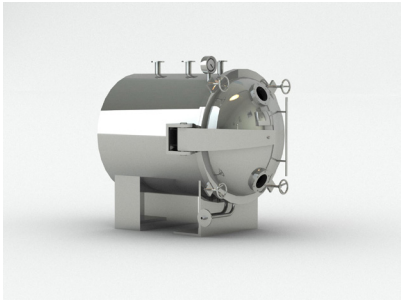
Technical Parameters:

Model	RXH-B-O	RXH-B-I	RXH-B-II	RXH-B-III	RXH-B-IV
Drying Capacity	60 kg	120 kg	240 kg	360 kg	480 kg
Power	0.45 kW	0.45 kW	0.9 kW	1.35 kW	1.8 kW
Steam Consumption	10 kg/h	20 kg/h	45 kg/h	71 kg/h	90 kg/h
Radiation Area	5 m	20 m	40 m	80 m	100 m
Blast	3450 mh	3450 mh	6900 mh	10350 mh	13800 mh
Temperature Deviation	± 2°C	± 2°C	± 2°C	± 2°C	± 2°C
Baking Disc	24	48	96	144	192
Baking Cart	1	2	4	6	8
Overall Dimension	1400 x 1200 x 2300	2300 x 1200 x 2300	2300 x 2200 x 2300	2300 x 2200 x 2300	4460 x 3200 x 2000

FZG, YZG Series Static Vacuum Dryer (Square & Round Types)

Application:

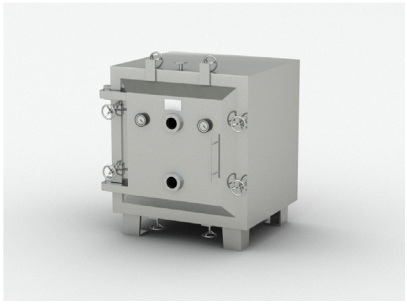
Incorporated for high efficiency tray drying, using the combination of heat and vacuum in order to optimise heat transfer from a wide range of reasonably free flowing materials. The feature of applying vacuum to the drying chamber ensures uniform and even drying throughout. Vacuum dry is divided into static and dynamic drier. The model YZG round vacuum drier of the model FZG square vacuum drier belong to the static drier type while the model SZG double cone rotating vacuum drier belongs to the dynamic drier type. When raw material is dried within the static type drier, the raw material is in static state and its shape remains stable. Where double drying is carried out within the rotary model SZG double cone unit, the drying time is lowered due to the continuous agitation of the material and the more even exposure to both heat and vacuum under the state of vacuum, the boiling point of the raw material will be lowered. Therefore these dryers are suitable for drying raw material that are unstable or thermally sensitive. The vacuum dryer also has good air retention and is suitable for drying raw materials that contain strong and toxic gases and where solvents need to be recovered. The vacuum dryer is widely used in the pharmaceutical, chemical, foodstuff and dyestuff industries and the design is in conformity with the requirements of GMP.



YZG-Round

Note: SZ water ring vacuum pump can be used together with the mechanical pressure pump in order to increase the vacuum level.

1. When ordering please choose the type of vacuum dryer in accordance with the physical property, primary moisture and final moisture of raw material to be dried and factors such as temperature, vacuum, drying amount and time required etc. vacuum dryers with the same model type have four methods of heating i.e. steam, hot water, heat conduction, oil and electric. For example, in order to increase the output of product, the number of drying layers can be increased.
2. The auxiliary equipment to suit the vacuum system is indicated in the user's manual and can be supplied and installed at the factory. Please indicate the requirements when ordering.
3. For any special requirements, the factory can also design, manufacture and install as requested.



FZG-Square

Technical Parameters:

Model	YZG-600	YZG-800	YZG-1000	YZG-1400A	FZG-10	FZG-15	FZG-20
Inner size of drying chamber	Ø 600 x 976	Ø 800 x 1247	Ø 1000 x 1527	Ø 1400 x 2054	Ø 1500 x 1060 x 1220	Ø 1500 x 1400 x 1220	Ø 1500 x 1800 x 1220
Outer size of drying chamber	1135 x 810 x 1020	1700 x 1045 x 1335	1693 x 1190 x 1500	2380 x 1675 x 1920	1924 x 1720 x 1513	1513 x 1924 x 2060	1924 x 2500 x 1513
Layers of dryer support	4	4	6	8	5	8	10
Interval	81 mm	82 mm	102 mm	102 mm	122 mm	122 mm	122 mm
Size of dryer tray	310 x 600 x 45	520 x 410 x 45	520 x 410 x 45	460 x 640 x 45	460 x 640 x 45	460 x 640 x 45	460 x 640 x 45
Quantity of dryer trays	4	8	12	32	20	32	60
Working pressure inside the pipe support	≤ 0.784 MPa	≤ 0.784 MPa	≤ 0.784 MPa	≤ 0.784 MPa	≤ 0.784 MPa	≤ 0.784 MPa	≤ 0.784 MPa
Operation temperature of dryer support	35-150°C	35-150°C	35-150°C	35-150°C	35-150°C	35-150°C	35-150°C
Degree of vacuum inside the chamber when operating	-0.1 Pa	-0.1 Pa	-0.1 Pa	-0.1 Pa	-0.1 Pa	-0.1 Pa	-0.1 Pa
Under the condition of 0.1 MPa and 110 evaporation rate of water	7.2 kg/m²hr	7.2 kg/m²hr	7.2 kg/m²hr	7.2 kg/m²hr	7.2 kg/m²hr	7.2 kg/m²hr	7.2 kg/m²hr
When Condenser is used (Model)	2X-15A	2X-30A	2X-30A	2X-70A	2X-70A	2X-70A	2X-90A
When Condenser is used, power of vacuum pump	2 kW	3 kW	3 kW	5.5 kW	5.5 kW	5.5 kW	
When Condenser is not used (Model)	SZ-0.5	SZ-1	SZ-1	SZ-2	SZ-2	SZ-2	SZ-2
When Condenser is not used, power of vacuum pump	1.5 kW	2.2 kW	2.2 kW	4 kW	4 kW	4 kW	5.5 kW
Weight of Drying Chamber	250 kg	600 kg	800 kg	1400 kg	1400 kg	1400 kg	3200 kg

GFG Series High Efficiency Fluidised Bed Dryer

Application:

This machine is used for drying of granulate material having a particle size of up to 0.16 mm and is applicable for quick drying of wet granulate and powdery materials as well as finished products and intermediate (semi-finished products) in such industries as pharmacy, foodstuff, light and chemical processing.

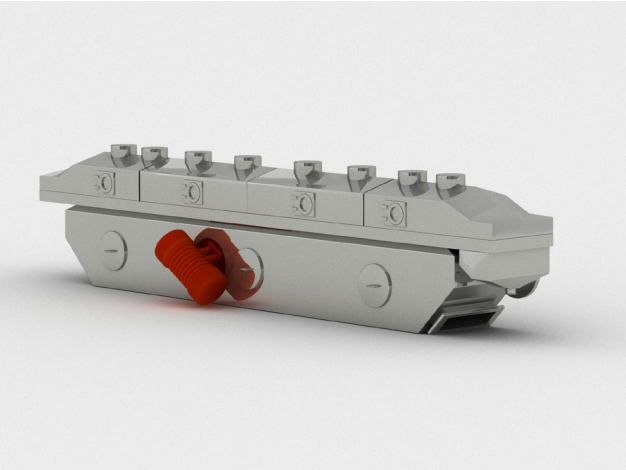
Operating Principle:

In operation air passes through a purification cabinet and heater, and from high speed airflow transfers up through the decks having perforated holes. The material reaches a fluidised state with the high velocity heated air carrying off the released product moisture. The evaporated air transfers via filters to atmosphere as the process is a batch operation. Full automation features are provided to enable consistent repeat performance.

Technical Parameters:

Model	GFG-60	GFG-100	GFG-120	GFG-150	GFG-200	GFG-300	GFG-500
Volume of Hopper	200 L	300 L	400 L	500 L	650 L	1000 L	1500 L
Production Capacity	30-60 kg/ batch	50-100 kg/ batch	60-120 kg/ batch	70-150 kg/ batch	100-200 kg/ batch	150-300 kg/ batch	200-500 kg/ batch
Air-in Temperature	50-100°C	50-100°C	50-100°C	50-100°C	50-100°C	50-100°C	50-100°C
Fan Air Volume	2576 m³/h	3488 m³/h	3619 m³/h	5114 m³/h	6032 m³/h	7766 m³/h	10800 m³/h
Fan Air Pressure	5639 Pa	5080 Pa	7109 Pa	5869 Pa	7610 Pa	9500 Pa	9500 Pa
Fan Power	7.5 kW	11 kW	15 kW	10.5 kW	22 kW	30 kW	45 kW
Stirrer Rotary Speed	11 r/min	11 r/min	11 r/min	11 r/min	11 r/min	11 r/min	11 r/min
Stirrer Motor	0.55 kW	0.55 kW	0.55 kW	0.75 kW	0.75 kW	1.1 kW	1.5 kW
Electric Heating Power	54 kW	63 kW	63 kW	72 kW	81 kW	99 kW	117 kW
Steam Pressure	0.4 MPa	0.4 MPa	0.4 MPa	0.4 MPa	0.6 MPa	0.6 MPa	0.6 MPa
Steam Consumption	140 kg/h	170 kg/h	210 kg/h	240 kg/h	280 kg/h	366 kg/h	451 kg/h
Compressed Air Pressure	0.5 MPa	0.5 MPa	0.5 MPa	0.5 MPa	0.5 MPa	0.5 MPa	0.5 MPa
Compressed Air Consumption	0.6 m³/h	0.6 m³/h	0.6 m³/h	0.9 m³/h	0.9 m³/h	0.9 m³/h	0.9 m³/h
Weight of Main Machine	1000 kg	1200 kg	1450 kg	1500 kg	1700 kg	2200 kg	2800 kg

ZLG Series Vibratory Fluidised Bed Dryer



Specification:

1. Available in a wide range of sizes and capacities
2. Contact parts are to GMP standards and manufactured from food grade stainless steel
3. Fully ISO approved
4. Available as turnkey installed unit with all ancillary equipment items or as an individual processing unit for replacement / upgrade requirements

Application:

This machine is suited to handling a wide range of food, industrial, chemical, agricultural and related product types which have a free flowing characteristic and are able to be fluidised. The raw material is fed into the machine at the head end using various feeding devices according to the material flow ability characteristics and moves forward continuously along the horizontal fluidised bed under the combined action of vibration and air pressure. The hot air passes through the bed and evaporates the product moisture with this being carried off to the following filter collector / receiver or optional cyclone separators or the combination of both. The completed dried product discharges through the discharge outlet for further screening or cooling according to process application requirements.

Features:

The hot air may be supplied as either direct heat from a gas furnace or from an indirect heat exchanger, steam to air, hot water to air, furnace gas heating etc.
The initial material is heated evenly with complete contact across the full bed surface area and the drying capacity is high with typical energy savings of around 30% compared to alternative type dryers. In combination with the fluidise effect the vibratory motion of the deck is incorporated from two out of balance vibratory motors which enable variable adjustment and are stable in operation have lower maintenance and ensures quiet operation. The fluid state of the material on the feed bed remains stable with no dead spots or blind areas and may be altered by adjustments to air flow, vibratory amplitude and bed tilt angle. Further regulation to the material flow rate and product dwell time may be made by incorporation of a V/S controller to the two vibratory motor drives. Product ingredient degradation is minimal and this type of dryer is well suited for handling friable materials as well as products which have a wide range of particle size features or differing density product types. The fluidised bed processor is a completely enclosed operation and does not exit dust or process air to the atmosphere.

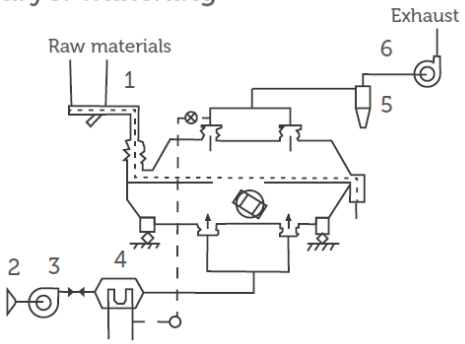
Operating Principle:

The fluidised bed processor is suitable for drying, drying and cooling or simply cooling applications and may be supplied with a range of support processing equipment to meet a wide range of applications such as:

- Pharmaceutical and chemical industries: Press tablets and granules, boric acid, borax, dihydroxybenzene, malic acid, and urea etc.
- Foodstuff Industries: Breakfast cereals, monosodium glutamate, sugar, salt, grains, pulses, processing residue products etc.
- Agro Chemical Applications: Drilled seed drying, fertiliser granulation drying / cooling residue etc.

Vibration fluidized bed dryer matching system diagram:

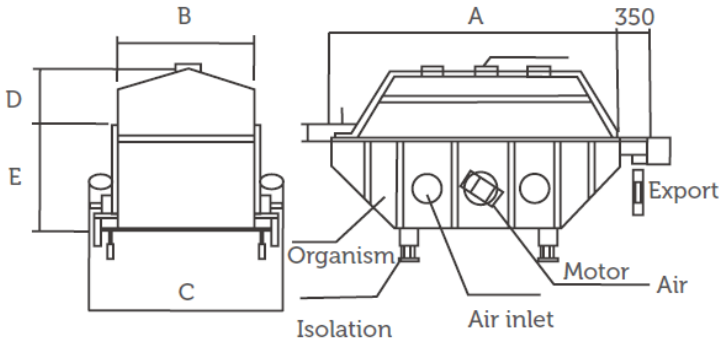
1.Filter
2.Blower
3.Heat exchanger
4.Cyclone
5.Exhaust Fan



Technical Parameters:

Model	A	B	C	D	E	F	Weight
ZLG 3x0.3	3000	300	1000	940	510	2020	1250 kg
ZLG 4.5x0.3	4500	300	1000	940	510	2020	1560 kg
ZLG 4.5x0.45	4500	450	1210	940	590	2100	1670 kg
ZLG 4.5x0.6	4500	600	1360	940	660	2170	1910 kg
ZLG 6x0.45	6000	450	1260	940	590	2100	2100 kg
ZLG 6x0.6	6000	600	1410	940	660	2170	2410 kg
ZLG 6x0.75	6000	750	1600	940	740	2250	2340 kg
ZLG 6x0.9	6000	900	1750	940	810	2320	3160 kg
ZLG 7.5x0.6	7500	750	1660	940	740	2250	3600 kg
ZLG 7.5x0.75	7500	750	1660	940	740	2250	3600 kg
ZLG 7.5x0.9	7500	900	1810	940	810	2320	4140 kg
ZLG 7.5x1.2	7500	1200	2110	940	960	2470	5190 kg

ZLG Series vibration fluidized bed dryer:



Model	Production	Spring Length	Diameter Screen Aperture	Motor Power	Speed	Overall Dimension
ZLG 3x0.3	0.9 m^2	70-140°C	40-70°C	20-35 kg/h	ZDS 31-6	0.8 x 2 kW
ZLG 4.5x0.3	1.35 m^2	70-140°C	40-70°C	35-505 kg/h	ZDS 31-6	0.8 x 2 kW
ZLG 4.5x0.45	2.025 m^2	70-140°C	40-70°C	60-70 kg/h	ZDS 32-6	1.1 x 2 kW
ZLG 4.5x0.6	2.7 m^2	70-140°C	40-70°C	70-90 kg/h	ZDS 32-6	1.1 x 2 kW
ZLG 6x0.45	2.7 m^2	70-140°C	40-70°C	80-100 kg/h	ZDS 41-6	1.5 x 2 kW
ZLG 6x0.6	3.6 m^2	70-140°C	40-70°C	100-130 kg/h	ZDS 41-6	1.5 x 2 kW
ZLG 6x0.75	4.5 m^2	70-140°C	40-70°C	120-140 kg/h	ZDS 42-6	2.2 x 2 kW
ZLG 6x0.9	5.4 m^2	70-140°C	40-70°C	140-170 kg/h	ZDS 42-6	2.2 x 2 kW
ZLG 7.5x0.6	4.5 m^2	70-140°C	40-70°C	130-150 kg/h	ZDS 42-6	2.2 x 2 kW
ZLG 7.5x0.75	5.625 m^2	70-140°C	40-70°C	150-180 kg/h	ZDS 51-6	3.0 x 2 kW
ZLG 7.5x0.9	6.72 m^2	70-140°C	40-70°C	160-210 kg/h	ZDS 51-6	3.0 x 2 kW
ZLG 7.5x1.2	9 m^2	70-140°C	40-70°C	200-260 kg/h	ZDS 51-6	3.0 x 2 kW

DW Series Belt Dryer

Application:

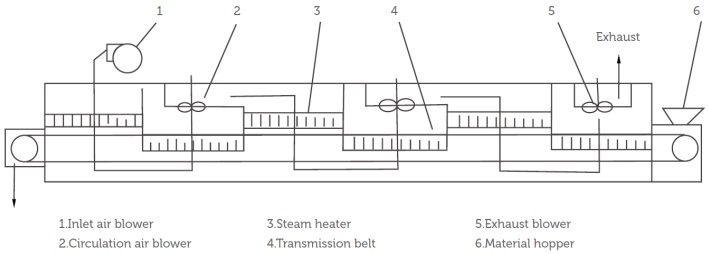
This type of dryer is suitable for drying materials with in a wide range of applications including pharmaceutical, chemical, foodstuff, gum, electronic, de-watering vegetables, particle feed, gourmet powders, shredded coconut, stuffing, organic color compound, rubber, acryl fibre, medicinal products, medicine material, small wood product, plastic products, aging and solidification of electronic components etc.

Features:

The materials are uniformly spread onto the mesh belt by the material spreader. The mesh belt generally has 12 – 60 mesh stainless steel wire and it is drawn and moved inside the dryer by a transmission unit. The dryer is composed of several units, the hot air is circulated separately some exhaust gas is discharged with a special moisture elimination blower. The waste gas is controlled through an adjustment valve. The hot air passes through the mesh belt covered with the material from the top to the bottom or from the bottom to the top and this will complete the heat and mass transfer process. The finished dried product drops into the material collector continuously. The top and lower circulation units can be equipped according to the users demand and the unit can be selected according to the particular drying requirements.

Operating Principle:

Widely used for drying agglomerated, strip, pelleted, flaked, extruded and similar type materials, and is used for drying high moisture content and lose state materials having good ventilation. The machine is suitable for the materials such as de-watering vegetable, herbal leaf materials and others for which the water content rate is high, and high temperature is not recommended. The machine has the advantages that its drying speed is fast and the evaporation strength is high with the product quality being good. The de-watered filter cake and similar paste type materials as well as high fibre products may be readily dried. The machine design meets GMP standards and operation is via an automated control system.



Technical Parameters:

Model	DW-1.2-8	DW-1.2-10	DW-1.6-8	DW-1.6-10	DW-2-8	DW-2-10
Unit number	4	5	4	5	4	5
Belt width	1.2 m	1.2 m	1.6 m	1.6 m	2 m	2 m
Drying section length	8 m	10 m	8 m	10 m	8 m	10 m
Thickness of the material to be dried	10-80 mm	10-80 mm	10-80 mm	10-80 mm	10-80 mm	10-80 mm
Temperature	60-130°C	60-130°C	60-130°C	60-130°C	60-130°C	60-130°C
Steam pressure	0.2-0.8M MPa	0.2-0.8 MPa	0.2-0.8 MPa	0.2-0.8 MPa	0.2-0.8 MPa	0.2-0.8 MPa
Steam consumption	120-300 kg/h	150-375 kg/h	150-375 kg/h	170-740 kg/h	180-500 kg/h	225-600 kg/h
Drying time	0.2-1.2 h	0.25-1.5 h	0.2-1.2 h	0.25-1.5 h	0.2-1.2 h	0.25-1.5 h
Drying strength	60-160 kg H_2O/h	80-220 kg H_2O/h	75-220 kg H_2O/h	95-250 kg H_2O/h	100-260 kg H_2O/h	120-300 kg H_2O/h
Total blower power	9.9 kW	12.1 kW	9.9 kW	12.1 kW	18.2 kW	22.2 kW
Total equipment power	11.4k kW	13.6 kW	11.4 kW	13.6 kW	19.7 kW	23.7 kW

LPG Series High-Speed Centrifuge Atomising Dryer

Specification:

1. Available in five sizes/capacities
2. Contact parts to GMP standards and manufactured from high grade stainless steel.
3. Fully ISO approved.
4. Suitable for drying emulsions, suspended liquids and liquid materials

Application:

The LPG series high speed centrifuge atomising dryer is a specialised type of dryer suitable for drying emulsions, suspended liquids, emulsified liquids etc. The principle has a unique advantage in drying polymers and resins, dyestuffs and pigments, ceramics, gloss, de-rusting agents, pesticides, carbon hydrates, dairy products, detergents and surfactants, fertilisers, organic compounds, inorganic compounds etc.

Features:

A rapid drying efficiency of 5 – 15 seconds and is normally suitable for drying thermal sensitive raw material. It is ideal for drying colored, small and physical appearance materials. This machine has a stable operation with convenient regulations and controls and is suitable for continuous processing operations. The distribution, fluidity and solubility of finish product meet the international standards.

Operating Principle:

Hot air is supplied to the top of the drying chamber via either a direct heat or indirect heat air filter and enters the chamber tangentially. In concert the liquid material to be dried is atomised via a centrifugal atomiser at the top of the dryer chamber via a pump and filter arrangement where the liquid forms atomised droplets. The liquid droplets and hot air converge and evaporation of the droplet surface liquid occurs rapidly. The dried material is drawn down into the receiving hopper section for discharge to the cyclone separator. Hot moisture laden air transfers to the atmosphere via the exhaust system.

Technical Parameters:

Model	LPG-5	LPG-25	LPG-50	LPG-150	LPG-250-5000
Inlet temperature	Automatic control 140-350°C	Automatic control 140-350°C	Automatic control 140-350°C	Automatic control 140-350°C	Automatic control 140-350°C
Outlet temperature	80-90°C	80-90°C	80-90°C	80-90°C	80-90°C
Max evaporated amount of moisture	5 kg/h	25 kg/h	50 kg/h	150 kg/h	250-5000 kg/h
Drive for the centrifugal nozzle	Compressed air drive	Mechanical drive	Mechanical drive	Mechanical drive	Mechanical drive
Revolution	25000 rpm	18000 rpm	18000 rpm	15000 rpm	8000-15000 rpm
Diameter of atomising disk	50 mm	120 mm	120 mm	150 mm	180-240 mm
Heat source	Electricity	Steam+electricity	Steam+electricity, oil fuel, hot air furnace	Steam+electricity, oil fuel, hot air furnace	Steam+electricity, oil fuel, hot air furnace
Max.power of electric heater	9 kW	36 kW	72 kW	99 kW	Affirm it in accordance with practical conditions
Overall dimension	1.8 x 0.93 x 2.2	3 x 2.7 x 4.26	3.5 x 3.5 x 4.8	5.5 x 4 x 7	Affirm it in accordance with practical conditions
Recovery rate of dry powder	> 95%	> 95%	> 95%	> 95%	> 95%

FL Series Fluidised Granulating Dryer

Features:

Mixing, granulating and drying are completed within a single process and the process is completely sealed with no dust emissions to atmosphere. The filter media has anti-static properties for added safety and explosion relief features are installed. All contact surfaces areas are rounded and designed for easy cleaning with sight glass inspection ports being fitted. The loading and unloading is easily carried out.

Operating Principle:

Granulation of the solution occurs through droplets fluidising when coming into contact with the hot air within the spray chamber. Clean heated air is introduced into the lower spraying area where it rises to contact the sprayed liquid. The rapid evaporation of moisture within the droplets produces granules which remain in suspension in a fluidised state. The evaporated high moisture air discharges via a filter assembly to atmosphere while the formed granules accumulate in the removable sealed hopper assembly. In operation the fluidised granulator produces an even particle size finished granule as a continuous operation. All contact parts are manufactured to the GMP standards in stainless steel and complete operation is controlled from an automated process control panel where parameters may be set according to process requirements.

Technical Parameters:

Model	FL-3	FL-5	FL-15	FL-30	FL-60	FL-120	FL-200	FL-300	FL-500
Container Volume	12 L	22 L	45 L	100 L	220 L	420 L	670 L	1000 L	1500 L
Container Diameter	300 mm	400 mm	550 mm	700 mm	1000 mm	1200 mm	1400 mm	1600 mm	1800 mm
Capacity	3 kg/batch	5 kg/batch	15 kg/ batch	30 kg/ batch	60 kg/ batch	120 kg/ batch	200 kg/ batch	300 kg/ batch	500 kg/ batch
Fan capacity	1000 m^3/h	1200 m^3/h	1400 m^3/h	1800 m^3/h	3000 m^3/h	4500 m^3/h	6000 m^3/h	7000 m^3/h	8000 m^3/h
Fan pressure	375 mm H_20	375 mm H_20	480 mm H_20	480 mm H_20	950mm h2o	950mm h2o	950mm h2o	950mm h2o	950mm h2o
Fan power	3 kW	4 kW	5.5 kW	7.5 kW	11 kW	18.5 kW	22 kW	30 kW	45 kW
Steam flow	15 kg/h	23 kg/h	42 kg/h	70 kg/h	141 kg/h	211 kg/h	282 kg/h	366 kg/h	451 kg/h
Compressed air flow	0.9 m^3/min	0.9 m^3/min	0.9 m^3/min	0.9 m^3/min	1 m^3/min	1.1 m^3/min	1.1 m^3/min	1.5 m^3/min	1.5 m^3/min
Steam pressure	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa	0.3-0.6 MPa
Temperature	Adjustable between room temperature and 120°C								
Working time	Dependent on properties of the raw materials used								
Field	≥ 99%	≥ 99%	≥ 99%	≥ 99%	≥ 99%	≥ 99%	≥ 99%	≥ 99%	≥ 99%
Noise	< 75 dB, separate of fan								
Size	1.0 x 0.6 x 2.1	1.2 x 0.7 x 2.3	1.25 x 0.9 x 2.5	1.6 x 1.1 x 2.5	1.85 x 1.4 x 3	2.2 x 1.65 x 3.3	2.34 x 1.7 x 3.8	2.8 x 2.0 x 4.0	3 x 2.25 x 4.4
Weight of the main body	500 kg	700 kg	900 kg	1000 kg	1100 kg	1500 kg	1500 kg	1800 kg	2000 kg

6. CONVEYORS

ZKS Series Vacuum Conveyor

Features:
The vacuum conveyor is designed for industrial applications incorporating heavy duty components and is the ideal transfer equipment, used for transporting powder materials, granular materials and powder and granular materials for feeding the materials directly into mixers and processing applications. It reduces the likely dust emissions and is GMP certified. It is widely used in the pharmaceutical, foodstuff, feedstuff, chemical and plastics industries and for general processing material handling applications.

Operating Principle:
The vacuum conveyor consists of a vacuum unit (no oil, no water), feeding tube, PE filter, vacuum hopper, automatic control device, pneumatic discharging device and a compressed air pulsing unit.
The models ZKS-5 and ZKS-6 are newly developed products having the characteristics of low power consumption high capacity, low noise and reliable operation. It is the ideal type of equipment for transferring powder and granular materials to mixers and processing equipment including packers, reactors etc.

Model	Motor Power	Transmission Capacity
ZKS-1	1.5 kW	400 kg/h
ZKS-2	2.2 kW	600 kg/h
ZKS-3	3.0 kW	1200 kg/h
ZKS-4	5.5 kW	2000 kg/h
ZKS-5	4.0 kW	3000 kg/h
ZKS-6	5.5 kW	4000 kg/h
ZKS-7	5.5 kW	6000 kg/h

Screw Conveyors

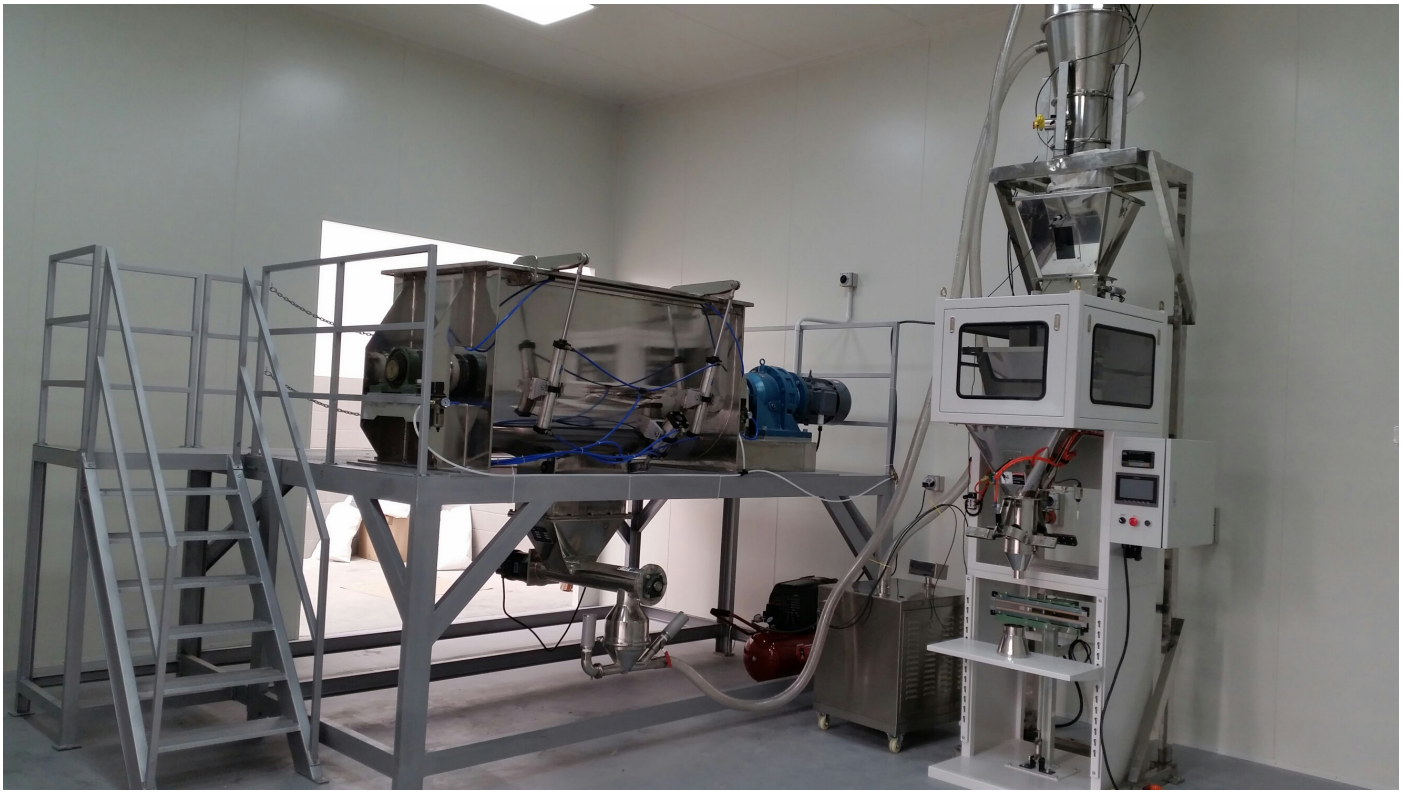
Operating Principle:
Widely incorporated to feed processing equipment, i.e. impact mills, screeners, packers etc. Also incorporated as a metering feeder for process applications.

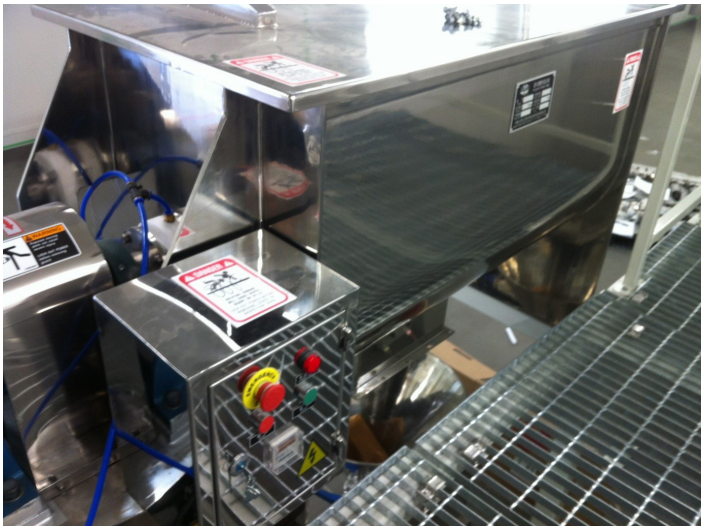
Features:
Supplied as solid shaft stainless steel fabricated units, complete with tipping station incorporating vibratory unit in sizes 75, 100, and 125 mm ø and lengths to suit application or optional flexible screw conveyor series in 75, 100 and 125 mm ø sizes capable of handling virtually any bulk solid materials. The flexible type conveyor has the added advantage of being able to accommodate varying installations location requirements such as bending around, over or beneath existing facilities. Suited to handling materials that can bridge, pack, fluidise and be otherwise hard to handle.

Belt Conveyors

Operating Principle:
Incorporated within the process applications for transfer from one process to another, particularly for finished products and larger particle size materials. Is widely used for handling friable products likely to be damaged by screw conveyors or pneumatic conveying.

Features:
Suited to high capacity transfer of granular and processed finished products where minimum degradation is called for. The range of belt conveyors may be supplied to convey at lengths of up to 10 meters. The advantages include all food grade construction, easy clean down, high capacity, hygienic compliance, and sturdy design and available to suit specific applications. All fabricated components are of 304 stainless steel with a PVC cleated belt.



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Product
400G
Zero Band
0.100
F1
F2
F3
F4
F5
F6

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PROCESSING, HANDLING & STORAGE SYSTEMS

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AN ENGINEERING OFFICE THAT PUTS IDEAS INTO ACTION

We build systems for raw material
- In all sections of the food industry
- In the chemical industry
- In the agricultural commodity industry
- In the waste treatment / disposal industry

We have the perfect storage method
- With outdoor and indoor silos
- Homogenizing silos
- With Grain Tech's fluidised bed discharge systems
- Standard or tailored design for all additive ingredients and liquids

We convey products gently
- Through all types of pneumatic systems
- Through Grain Tech's pressure vessels
- Through vibratory conveying systems
- Through air slides and metering screws
- Through bucket elevators, various types of belt and drag link conveyors
- Through aero-mechanical conveyors

We sift raw materials to the highest specifications
- With orbital and gyratory sifters
- With screeners and rotary classifiers
- With vibratory and pneumatic in line sifters
- For classification control and final security sifting

We pulverise and mill raw materials to attain exact particle sizings
- By pre-breaking, hammer milling and crushing
- By roller milling, granulating and cutting

Our mixing achieves better quality
- Mechanically and pneumatically
- With or without liquid additions
- In batch or continuous systems

We can weigh and meter within extremely tight tolerances
- With Grain Tech's weigh mix systems
- Incorporating totally integrated weighing and processing control systems
- Using screw and vibratory metering feeders
- We change the characteristics and shape of commodities and materials

We effectively classify raw materials and finished product
- With gravity and air separators
- With mechanical graders and screeners

We have drying and cooling systems to meet most product types
- By fluid bed and vibratory conveying units
- By pneumatic circuits
- By column, tower and conveyor systems

We change the characteristics and shape of commodities and materials
- With pelletizing and agglomeration processes
- By extrusion processors

We manufacture and supply the following machines
- Rotary valves, blower units, diverter valves, multi-way valves, cyclones and transit separators
- Pipe systems, filter collectors
- Shut off valves, slide gate valves
- Hammer mills, crushers, pulverisers, roller mills, flaking mills
- Extruders, pelletizers, agglomerators
- Silos, bins and hoppers, discharging devices
- Mixers, blenders, sifters
- Control systems and measuring / metering equipment
- Bagging, packing and handling equipment

Special processing systems or machines
- Extrusion processing lines
- Complete cereal processing lines
- Complete animal feeds manufacturing

Our engineering office plans and develops. We can design & solve your problems

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