



XI'AN TOPTION INSTRUMENT CO.,LTD



XI'AN TOPTION INSTRUMENT CO.,LTD

Tel:0086-29-88763980

0086-29-88990306

Email:info@toptionlab.com

Web:www.toptionlab.com

Add:GaoXin District,XI'AN CHINA

Dryer Series

Descriptions

◆The machine adopts full close structure with primary middle and high effect air filter to fit one hundred thousand grade requirement, the tower body is provided cool air jacket to make wall temperature less than 80°C, when the material stops on wall it will not to be preheated and softened, it increases the powder collection rate(95%)and will not appear mixing and sticking wall phenomenon.



◆Basic Principle:high-speed centrifuge atomizing for the extract of traditional Chinese medicine is an

application of centrifugal atomizing technique. It also uses high-speed atomizer to make liquid material into foggy droplet to contact with hot air fully to finish instant drying and get final powder product.

◆The ZPG Chinese herb extract spray dryer is specially designed to solved the problems which previous LPG spray dryer meets during drying herb extract and plant extract product as followings:

1. Raw material sticks to wall and powder collection rate is low.
2. Raw material stays on wall for a long time, resulting in coking and deterioration phenomenon.
3. It is difficult to clean and can not meet GMP requirements.
4. Low in output: LPG-150 type dryer can only process 50-60kg/h of raw material liquid.

◆ In view of above situation, according to properties and process requirements of traditional Chinese herb extract, our factory has researched and designed the special spray dryer for the extract liquid and got patents. It solves the historical difficult problems in drying the extract and product color after drying is good. The dried raw material does not degenerate too. It raises the economic benefit for user greatly. There are special features as below compared to ordinary LPG type spray dryer:

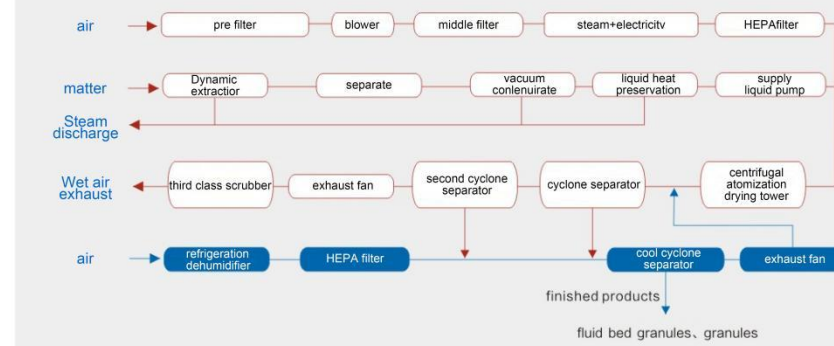
1. Adopt three-grade air filter, the inlet air reaches one hundred thousand grade.
2. Adopt wall cooling device, the temperature of inner wall will be less than 80°C. Even if raw material stays on inner wall surface, it will not be burnt and softened.
3. Its whole volume is 3.5 times of standard LPG high-speed spray dryer.
4. Adopt quick-open washing device, it can meet requirements for varieties production, the CIP auto cleaning device can also equip if needed.
5. Adopt wet duster and no powder dust leak out. It is in conformity with the requirements of environment protection.
6. Air sweeping device is optional, the clean effect is satisfied for some product.
7. Adopt PLC control and touch screen system to display system processing.
8. Dehumidifier and centralized collect system can be used to avoid product re-wetting and softening.



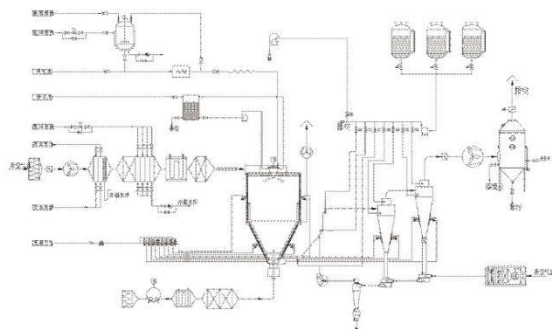
Features

1. The tower body is equipped with cool air jacket to reduce inside tower temperature and eliminate product preheating and softening phenomenon.
2. The atomizer on top of tower is equipped with cooling device to reduce atomizer temperature, at the same time effectively eliminate material return to the top in eddy current and avoid preheat coking phenomenon.
3. Tower body and pipeline is equipped with manual quick-open cleaning hole and drain hole, CIP automatic cleaning device can also equipped if needed.
4. A automatic control constant temperature feeding tank can be equipped.
5. Manual high pressure washing tools can be offered as accessories together with spray dryer.
6. All product contact parts are made with stainless steel (or whole parts with stainless steel)
7. Product collect way adopts two grade cyclones and water film duster.
8. Air inlet temperature is automatic and continuous control which is interlocked with feeding.
9. An air sweeping device can be optional for some product.
10. It can equip primary, middle and high efficient air filter to get one hundred thousand grade clean air.

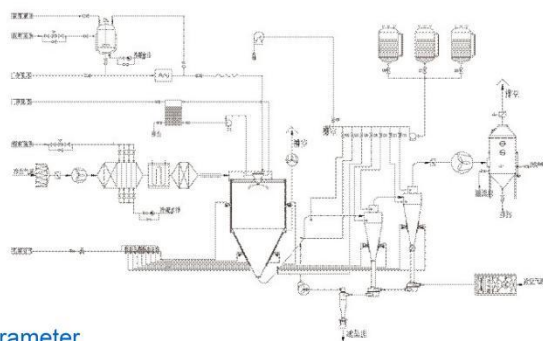
Flow chart



ZPG Spray Dryer Flow Drawing I



ZPG Spray Dryer Flow Drawing II



Technical Parameter

spec		ZPG-25	ZPG-50	ZPG-80	ZPG-100	ZPG-150	ZPG-200	ZPG-300
evaporation capacity(kg/h)		25	50	80	100	150	200	300
process amount of material liquid(kg/h)		25-34	50-68	80-108	100-135	150-203	200-270	300-406
output of finished product(kg/h)		4.8-7.2	9.2-14	14.8-22.4	18.4-28	24-42	36.8-56.4	55-85
solid content of material liquid(%)		18-30						
moisture content of finished product(%)		3-5						
electric power(kw)		63	99	132	153	204	246	330
heat source		Steam plus electricity						
collecting method of product and its efficiency		Grade one or two or three stage cyclone wet dust remover is greater than or equal to 95%						
automatic control meters and instruments		indicator of not air and exhaust air temperature						
temperature of air inlet(°C)		160-220						
temperature of air outlet(°C)		80-100						
overall dimensions(mm)	L	7000	8000	9800	11000	12200	14100	15000
	W	4000	5000	5700	6200	7000	7800	9000
	H	6200	6900	8000	8900	10750	11900	13000

Descriptions

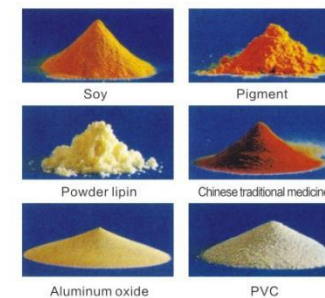
The centrifugal spray dryer is widely used technology in the liquid shaping technology and drying industry. It is suitable for producing powder, particle solid products from materials of solution, emulsion, solidus and culpable paste states. Therefore, when the particle size of the distribution final products, the residual water contents, the stocking density and the particle shape meet the precision standards, the centrifugal spray dryer is one of the most desired technologies.

Features and Outlines

Features

1. High speed of drying. After the spraying of the material liquid, the surface area of the material will be increased greatly. In the hot-air flow, 95%-98% of water can be evaporated at the moment. The time of completing the drying needs only several seconds. It is especially suitable for drying the heat sensitive materials.
2. Ats final products own the good uniformity, mobility, and dissolving capacity. And the final products are high in purity and good in quality.
3. The production procedure is simple and the operational control easy.

The liquid with the moisture contents 40-60% (for special materials, The contents may reach 90%). can be dried into powder or particle products at a time. After the drying, there is no need for smashing and sorting, so as to reduce the operation procedures in the production and Chance the product purity. The product particle diam enters, looseness and water contents can be adjusted through changing the operation condition in a certain scope, It is very convenient to carry out the control and management.

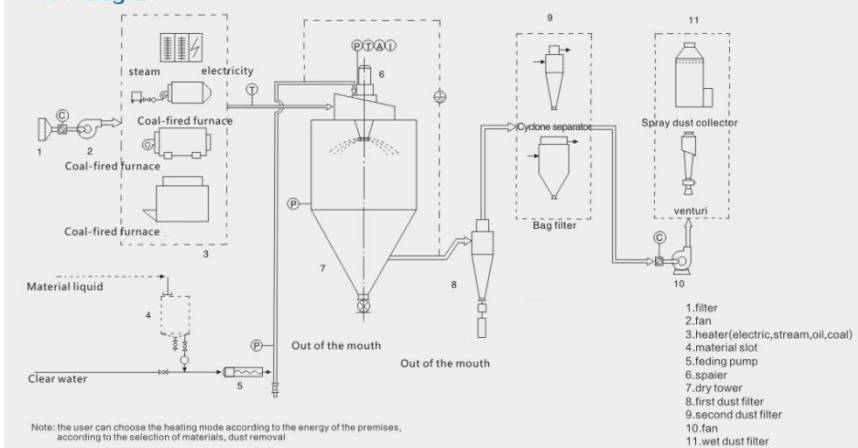


Outlines

1. Atomization: Atomizing system must ensure a uniform distribution of the fog drops, which is crucial to ensure a good qualified rate of products.
2. Contact of hot airflow and fog drops: When enough hot air enters into drying tower, the direction and angle of hot air flow have to be considered, no matter co-current flow, adverse current or mixed flow, must ensure the sufficient heat exchange, it is crucial.
3. The angle design of pipelines and cone: It is very important to select the suitable angle, here we would like to share our experience and data from production of thousands of this equipment.



Flow diagram



Technical Parameter

Model	5	25	50	100	150	200-10000
Inlet temperature °C	140-350 automatic control					
outlet temperature °C	~ 80-90					
Maximum moisture evaporation kg/h	5	25	50	100	150	200-10000
Centrifugal spray head drive	Compressed air drive		mechanical drive			
speed (r.p.m)	25000	18000	18000	18000	15000	8000-15000
Spray disc diameter (mm)	50	100	120	140	150	180-340
heat source	electric	Electricity + steam	Electricity + steam, fuel, gas			Resolved by the user
Maximum power of electric heating kW	9	36	63	81	99	
Outline dimension (m)	1.8 × 0.93 × 2.2	3 × 2.7 × 4.26	3.7 × 3.2 × 5.1	4.6 × 4.2 × 6	5.5 × 4.5 × 7	Determined according to specific circumstances
Dry powder recovery %	≥ 95	≥ 95	≥ 95	≥ 95	≥ 95	≥ 95

Note: evaporation of water is related to the characteristics of the material and the temperature of the inlet and outlet

Descriptions

SXG series rotating flash dryer is developed by our company, and its technology is based on advanced technology adored. The machine includes many superiority, such as reasonable design, compact stuction, widely utilization, great productive capacity, good quality, high effect and save energy. Drying, grinding and sieve are completed in one equipment in once time. It eliminates pollution and the technology is reached international advance level. Flash drying machine has the original bearing induction cooling (water cooling), oil pump design with connection to send oil lubrication, cooling the bearing, seal performance, on the spindle design USES a half ring, motor using speed regulation, smooth transmission, low noise, the service life is ten times of similar products.



Technical Parameter

Type	Barrel diameter (mm)	Main machine dimensions (mm)	Main machine power (kw)	Treatment wind capacity (m³/h)	Water evaporation quantity (kg/h)
SXG-2	200	250 × 2800	5-9	300-800	10-20
SXG-3	300	400 × 3300	8-15	600-1500	20-50
SXG-4	400	500 × 3500	10-17.5	1250-2500	25-70
SXG-5	500	600 × 4000	12-24	1500-4000	30-100
SXG-6	600	700 × 4200	20-29	2500-5000	40-200
SXG-8	800	900 × 4600	24-35	3000-8000	60-600
SXG-10	1000	1100 × 5000	40-62	5000-12500	100-1000
SXG-12	1200	1300 × 5200	50-89	10000-20000	150-1300
SXG-14	1400	1500 × 5400	60-105	14000-27000	200-1600
SXG-16	1600	1700 × 6000	70-135	18700-36000	250-2000



Descriptions

The drier is suitability in chemical industry, light industry, pharmaceutical, food, plastic, oil, slang, salt, sugar and so on, for drying, cooling and wetting

Features

- ◆ Raw material is heated evenly and heat exchange is fully used and dry capacity is high. Compared with ordinary drier, the energy can be saved about 30%.
- ◆ The vibration is created by motor. It is stable in operation and convenient in maintenance, low noise and long life span;
- ◆ The fluidized state is stable and no dead angle and phenomenon of broken out;
- ◆ It is good in regulation and wide in suitability.



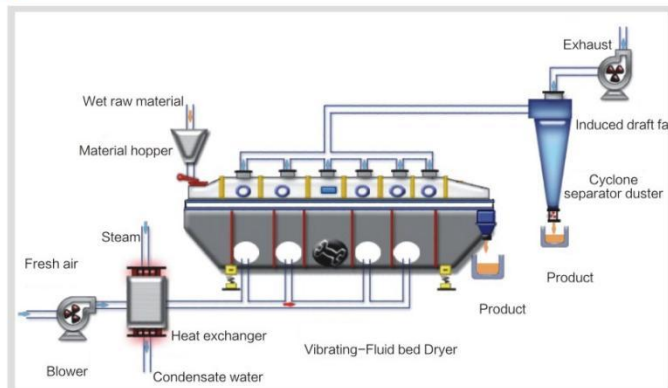
- ◆ It is small for damaging to the surface of raw material. The equipment can be used for drying raw materials that are easy broken. The drying effect can not be affected even if raw materials gave anomalous shape;
- ◆ It is effective to prevent from cross pollution between raw material and air because the equipment adopts fully closed structure. The environment of operation is clean.

Principle of work

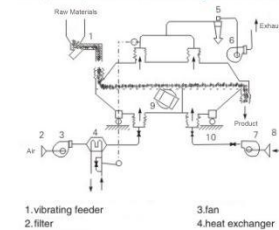
Raw material is fed into the machine and moves forward continuously along with the level of fluidized-bed under the action of vibration. The hot air passes through fluidized-bed and carries out heat exchange with damp raw material. Then the damp air is exhausted out through cyclone separator and dust collector and the dry product is discharged through discharge outlet.



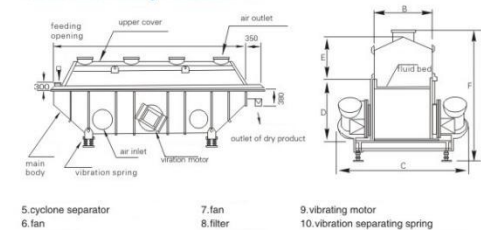
Flow chart



Complete System Chart of Vibrating Fluidized Bed



Sketch Chart of Vibrating Fluidized Bed



Technical Parameter

Model	Size	A	B	C	D	E	F	weight(kg)
	3 × 0.30	3000	300	1350	900	430	1650	1250
	4.5 × 0.30	4500	300	1350	900	430	1650	1650
	4.5 × 0.45	4500	450	1550	950	430	1700	1670
	4.5 × 0.60	4500	600	1650	950	430	1700	1910
	6 × 0.45	6000	450	1650	950	430	1700	2100
	6 × 0.60	6000	600	1700	1000	500	1700	2410
	6 × 0.75	6000	750	1850	1000	600	1850	2340
	6 × 0.9	6000	900	2000	1000	600	1850	3160
	7.5 × 0.6	7500	600	1850	1000	600	1850	3200
	7.5 × 0.75	7500	750	2000	1000	600	1850	3600
	7.5 × 0.9	7500	900	2100	1000	600	1850	4140
	7.5 × 1.2	7500	1200	2500	1150	800	2050	5190
	7.5 × 1.5	7500	1500	2850	1570	800	2370	6426
	8 × 1.8	8000	1800	3250	1800	900	2700	8600

Model	Area of fluidized-bed (M ²)	Temperature of inlet air (°C)	Temperature of outlet (°C)	Capacity to vapor moisture(kg/h)	Vibration motor	
					Model	Power kw
3 × 0.30	0.9	70 ~ 140	40 ~ 70	20 ~ 35	YZS8-6	0.75 × 2
4.5 × 0.30	1.35			35 ~ 50	YZS10-6	0.75 × 2
4.5 × 0.45	2.025			50 ~ 70	YZS15-6	1.1 × 2
4.5 × 0.60	2.7			70 ~ 90	YZS15-6	1.1 × 2
6 × 0.45	2.7			80 ~ 100	YZS15-6	1.5 × 2
6 × 0.60	3.6			100 ~ 130	YZS20-6	1.5 × 2
6 × 0.75	4.5			120 ~ 170	YZS20-6	2.2 × 2
6 × 0.9	5.4			140 ~ 170	YZS30-6	2.2 × 2
7.5 × 0.6	4.5			130 ~ 150	YZS30-6	2.2 × 2
7.5 × 0.75	5.625			150 ~ 180	YZS40-6	3.0 × 2
7.5 × 0.9	6.75			160 ~ 210	YZS40-6	3.0 × 2
7.5 × 1.2	9.0			200 ~ 280	YZS50-6	3.7 × 2
7.5 × 1.5	11.25			230 ~ 330	YZS50-6	3.7 × 2
8 × 1.8	14.4			290 ~ 420	YZS75-6	5.5 × 2



Descriptions

The fluidized bed dryer consists of air filter, heater, fluidized bed, rotating segment feeder, cyclone separator, bag dust remover, high press. centrifugal fan and stage for operation. According to different characters of different materials to be dried, the dryer can be equipped with both cyclone separator and bag dust remover or with either of them. Generally speaking, for those pellet materials with a large specific gravity, only a cyclone separator is needed. And for those granule or powder materials with a small specific gravity, a bag dust remover is needed and so is a pneumatic conveying device if possible. The dryer can also be equipped with a rotating segment feeder if required.



Principle of work

Granule or pellet solid materials are fed into the fluidized bed dryer through the feeder. Filtrated clean air is heated and charged onto the bottom of the fluidized bed to contact with the solid materials on the distributing plate, where fluidization can be reached and the heat exchange between solid and air can be achieved. After being dried, the products are discharged from the outlet. Waste gas is discharged from the top of the fluidized bed, and powder materials are recovered by the cyclone separator or bag dust remover.



Applications

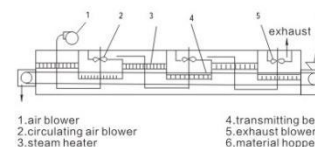
DWT Belt dryer is continuous dryer for large production. It is used for drying sheet materials, bar materials, granules materials that have good air permeability. As to dehydrated vegetable Chinese herb pieces which have high moisture and need low drying temperature, DWT belt dryer is specially suitable.



Principle of work

The materials are uniformly put on the mesh-belt by the material charger. The mesh-belt used generally 12-60 mesh stainless steel wire net and it is drawn and moved inside the driver by a transmission device. The drier is composed of several units. For each unit, the hot air is circulated separately. In the first unit, air out from circulation air blower (5) pass through beside into low unit, after air is up and heated by steam heater (4), be shared by separator (3), the

air is sprays through mesh-belt in to top of machine. The drying process is hot air passes through the mesh-belt covered with asprcial moisture from the top to the bottom of from the bottom to the top, and this will complete the heat and mass transfer process. The air pipe of the top is connected with fan, one part of air is circulated, some exhausted gas is discharged with a special moisture eliminate blower, and other waste gas is controlles through an adjustment elimination blower, and other waste gas is controlles through an adjustment valve. The top and low circulation units can be freely equipped according to the user's demand, The unit number can be selected according to the demand.



Technical Parameter

Parameter Type	m'	Drying capacity (water Kg/h)	Air blower			Air intake temp (°C)	Material discharge temp (°C)	Heating energy consumption	
			Power (kw)	Air pressure (Pa)	Air volume (m ³ /H)			Steam (Kg/h)	Elec power (kw)
XF-10A	0.25	10 - 15	5.5	4900	2300	60 - 140	40 - 80	50	30
XF-10B	0.25		4	3800	2300				
XF-20A	0.5	20 - 25	7.5	5000	3100			100	60
XF-20B	0.5		5.5	3500	3100				
XF-30A	1.0	30 - 45	15	6000	4200			150	90
XF-30B	1.0		11	4700	4200				
XF-50A	2.0	50 - 80	22	7400	6000			250	150
XF-50B	2.0		18.5	5900	6000				

Drying capacity: when drying sweet-sour plum crystals, it should be measured on the basis the primary moisture contents of 20% and final moisture contents of 5% and the air intake temperature at 130°C. The dry capacity of other materials should be based on different drying conditions.
Heating energy consumption: Steam or electric power may be used separately.

Technical Parameter

Type	DWT-1.2-8	DWT-1.2-10	DWT-1.6-8	DWT-1.6-10	DWT-2-8	DWT-2-10
unit number	4	5	5	5	4	5
belt width (m)	1.2	1.2	1.6	1.6	2	2
length of drying section (m)	8	10	8	10	8	10
thickness of the material to be covered (mm)	10-80					
temperature (°C)	60-150					
steam pressure (Mpa)	0.2-0.8					
steam consumption (Kg/h)	120-300	150-375	150-375	170-470	180-500	225-600
drying time (h)	0.2-1.2	0.25-1.5	0.2-1.2	0.25-1.5	0.2-1.2	0.25-1.5
drying efficiency (Kg H ₂ O/h)	60-160	80-220	75-220	95-250	100-260	120-300
total power of the blower (kw)	6.6	8.8	9	12	12	16
total power of the equipment (kw)	7.15	9.55	9.55	12.75	12.55	16.75



Descriptions

The raw materials to be treated should distribute on the conveyor belt through suitable mechanism such as star distributor, swing belt, crusher or granulator. The conveyor passes through the channel including of one or several heating unit. Each heating unit equips with air heater and circle system. Each channel has one or several damp discharge systems. When the conveyor passes through it, hot air will pass through the raw material from up to bottom or from bottom to up. So the raw materials can be dried evenly.



Application

The belt dryer is an ordinary continuous drying equipment. It is widely used for chemical industry, foodstuff industry, pharmaceutical industry, construction materials industry, electronics industry and so on. Especially it is suitable for drying raw materials that are good in breathability and have the shape of pieces or strip of granule. It is also possible to dry the raw materials such as filter cake after shaped by granulator or extruder.



Typical products

Dehydrated vegetable, granule feed, monosodium glutamate, check extraction, organic pigment, synthetic rubber, propylene fiber, medicine, medical materials, small wooden products, plastic products, aging or solidifying for electronic elements.



Technical Parameter

Type	DW1.6-I fed table	DW1.6-II middle table	DW1.6-III discharge table	DW2-I fed table	DW2-II middle table	DW2-III discharge table
belt width (mm)	1.6	1.6	1.6	2	2	2
drying section length (m)	10	10	8	10	10	8
thickness of the material to be covered(mm)	100	100	100	100	100	100
temperature(°C)	50-150°C	50-150°C	50-150°C	50-150°C	50-150°C	50-150°C
Area of heat conduction(m ²)	525	398	262.5	656	497	327.5
steam pressure(MPa)	0.2-0.8	0.2-0.8	0.2-0.8	0.2-0.8	0.2-0.8	0.2-0.8
drying time(h)	0.2-1.2	0.2-1.2	0.2-1.2	0.2-1.2	0.2-1.2	0.2-1.2
power(kw)	15.75	12.75	9.55	20.75	16.75	12.55
Overall Dim.(m)	12 × 1.81 × 1.9	12 × 1.81 × 1.9	10 × 1.81 × 1.9	12 × 2.4 × 1.92	12 × 2.4 × 1.92	10 × 2.4 × 1.92

Note: 1)When make fed table, middle table and discharge table with same specification mentioned above in series for use, it can form the process requirements of productions line for vegetables dehydration and raise the output obviously and guarantee the quality of products effectively.
2)The height of equipment does not include the height of fan and air duct.



Principle of work

SZG Double Conical Revolving Vacuum Dryer is double conical rotating cylinder. Under the state of vacuum in the cylinder, pass conduction oil or hot water into the jacket to heat. The heat will be contacted with damp raw material through inner wall. The evaporated steam after the raw material absorbed heat will be exhausted through vacuum pump. Because the inner of cylinder is in vacuum state and the cylinder make raw material turn over from up to down and from inner to outer, the drying speed is fastened and the drying efficiency is improved, and the purpose of uniform drying can be reached.

The Double Conical Revolving Vacuum Dryer is a new style dryer integrated mixing and drying in one body. It is equipped with condenser and vacuum pump (if the solvent does not recover, the condenser may not be used). The design of this machine is advanced and its inner structure is simple. So its clean is very convenient and the raw material can be discharged fully and its operation is very simple. It can reduce labour and improve working environment. At the sometime when the cylinder is rotating, the raw material is rotated too, the materials of cylinder can not be accumulated on the container. Its coefficient of thermal transmission is high and the drying speed is high. Not only it can save energy but also the raw material can be dried fully and uniformly and the quality of product is high. It can be used wide for pharmaceutical industry, chemical industry, foodstuff industry, dyestuff industry, etc.

Scope of application

It is suitable for drying heat sensitive raw materials of pharmaceutical industry, chemical industry, foodstuff industry, electronic industry, Chinese herb medicine industry, etc.

Technical Parameter

name	item	unit	100	350	500	750	1000	1500	2000	3500	4500	5000
Volume inside of tank	L		100	350	500	750	1000	1500	2000	3500	4500	5000
Max.loading capacity	L		40	140	200	300	400	600	800	1400	1800	2000
Max.loading weight	Kg		20	70	100	150	200	300	400	700	900	1000
Revolution	rpm		3-13					6	5	4	4	4
Heating area	m ²		1.1	2.3	2.8	3.9	5.1	6.5	8.2	12.2	16.5	18.2
Power of motor	kW		0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15
Occupied area,LxW	mm		2160x800	2160x800	2350x800	2560x1000	2860x1300	3060x1300	3260x1400	3760x1800	3960x2000	4400x2500
Rotating height	mm		1750	2100	2250	2490	2800	2940	2990	3490	4100	4200
Design pressure inside of tank	Mpa		-0.1-0.15									
Design pressure of jacket	Mpa		≤0.3									
Weight	Kg		800	1100	1200	1500	2800	3300	3600	6400	7500	8600



Principle of work

- ◆Wet materials are fed continuously to the first drying layer on the top of the dryer. They will be turned and stirred by rakes when the rake arm rotates and drop down to the outer edge of the large drying plate along the exponential helical line. On the small drying plate they will be moved to its outer edge and drop down to the outer edge of the large drying plate underneath, and will be moved inward and drop down from its central hole to the small drying plate on the next layer. Both small and large drying plates are arranged alternately so as materials can go through the whole dryer continuously. The heating media, which could be in forms of saturated steam, hot water or heat conducting oil will be led into hollow drying plates from one end to the other end of the dryer.
- ◆The dried materials will drop from the last layer of the drying plate to the bottom layer of the shell body, and will be moved by rakes to the discharge port. The moisture escapes from materials and will be removed from the moist discharge port on the top cover, or sucked out by the vacuum pump on the top cover for vacuum-type plate dryer. The dried materials discharged from the bottom layer can be packed directly.
- ◆The drying capability can be raised up if equipped with supplementary devices such as finned heater, condenser for solvent retrieval, bag dust remover, return and mix mechanism for dried materials and drawing fan etc. Solvent in those dried paste and heat sensitive materials can be easily retrieved, and thermal decomposition and reaction can be also carried out.



Technical Parameter

Type	Diameter (mm)	High (mm)	Area of dry (m ²)	Power (Kw)
1200/4	1865	2877	3.3	1.1
1200/6		3297	4.9	
1200/8		3717	6.6	
1200/10		4137	8.2	
1200/12	2166	4557	9.9	2.2
1500/6		3327	8.0	
1500/8		3747	10.7	
1500/10		4167	13.4	
1500/12	2820	4587	16.1	3.0
1500/14		5007	18.8	
1500/16		5427	21.5	
2200/6		3781	18.5	
2200/8	3768	4201	24.6	4.0
2200/10		4621	30.8	
2200/12		5041	36.9	
2200/14		5461	43.1	
2200/16	3768	5881	49.3	5.5
2200/18		6301	55.4	
2200/20		6721	61.6	
2200/22		7141	67.7	
2200/24	3768	7561	73.9	11
2200/26		7981	80.0	
2200/28		8401	86.1	
2200/30		8821	92.2	

Type	Diameter (mm)	High (mm)	Area of dry (m ²)	Power (Kw)
2500/6	3115	3981	26.3	4
2500/8		4401	35	
2500/10		4821	43.8	
2500/12		5241	52.5	
2500/14	3115	5661	61.3	7.5
2500/16		6081	70.0	
2500/18		6501	78.8	
2500/20		6921	87.5	
2500/22	3768	7341	96.3	11
2500/24		7761	105	
2500/26		8181	113.8	
3000/8		5143	48	
3000/10	5643	60		
3000/12	6143	72		
3000/14	6643	84		
3000/16	3768	7143	96	15
3000/18		7643	108	
3000/20		8143	120	
3000/22		8643	132	
3000/24	3768	9143	144	18.5
3000/26		9643	156	
3000/28		10143	168	
3000/30		10643	180	

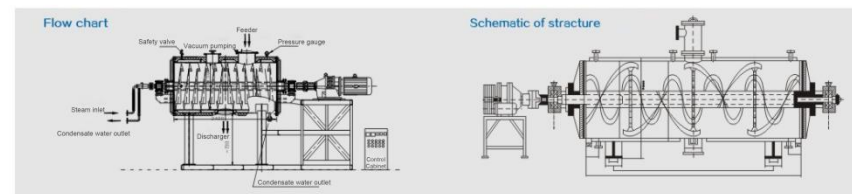


Application

- ◆Drying for below materials in pharmaceutical, food and chemical industry etc.
- ◆Suitable for thick liquid form, paste, powdery materials.
- ◆Temperature sensing materials requiring low temperature drying.
- ◆Explosive, strong stimulating, extremely poisonous substance, material that easy to oxidize.
- ◆Demand to retrieve the materials of the organic solvent.

Principle

- ◆This machine is a new type of intermittent vacuum drying equipment, wet material by conduction evaporation, with scraper agitator will remove material on hot surface, and move in the container to form a circulation flow of water evaporation by vacuum pump.



Features

- ◆The machine adopts the method internal and mixing to heat, the heat transfer area is big.
- ◆the machine is stirred and the material is formed in a continuous circulation state, which further increases the uniformity of the heat of the material.
- ◆This machine set up dry, which dry the slurry paste, paste materials.

Technical Parameter

Item	unit	type									
		ZKG-500	ZKG-750	ZKG-1000	ZKG-1500	ZKG-2000	ZKG-3000	ZKG-5000	ZKG-8000	ZKG-10000	
Name											
Working volume	L	300	450	600	900	1200	1800	3000	4800	6000	
size in the cylinder	mm	φ600x1500	φ800x1500	φ800x2000	φ1000x2000	φ1000x2600	φ1200x2600	φ1400x3400	φ1600x4500	φ1800x4500	
Stirring revolution	rpm	10-15		10		8-10		5	5	5	
Power	kw	3	4	5.5	5.5	7.5	11	15	22	30	
Design pressure of jacket	MPa	< 0.3									
Pressure in the cylinder	Mpa	-0.09 ~ -0.096									
Heat exchange area	m ²	2.4+1	3.2+1.2	4.5+1.5	5.6+1.8	7.5+2.2	9+2.5	14+3.5	21.6+5.5	24.3+5.5	

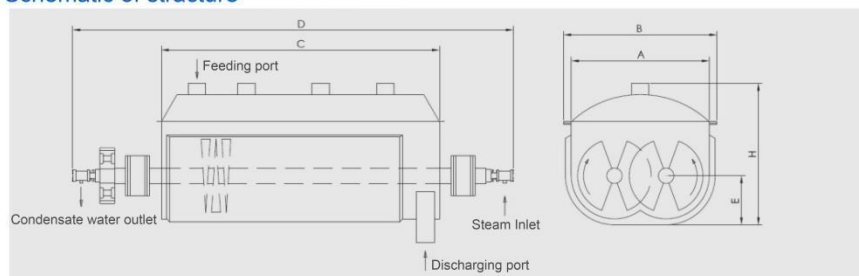


Principle of work

◆Paddle type dryer is a kind of heat conduction-based horizontal mixing dryer, the main structure is a jacketed W-shaped shell with a pair inside low-speed rotating hollow shaft, the shaft is welding a number of hollow mixing blade, jacket and hollow stirrer are passed through heat medium, and the two heating surfaces dry materials at same time. Therefore, the machine has a prominent heat transfer rate than general conduction dryer. Biaxial or multi-axis type can be designed according to actual needs.

◆The hot air is usually fed from the middle of dryer and discharged from the other side through the surface of material layer in the agitated state. Heating medium can be steam, hot water, or high temperature heat transfer oil.

Schematic of structure



Technical Parameter

Model	KJG-3	KJG-9	KJG-13	KJG-18	KJG-29	KJG-41	KJG-52	KJG-68	KJG-81	KJG-95	KJG-110	KJG-125	KJG-140
Heat transfer area (m ²)	3	9	13	18	29	41	52	68	81	95	110	125	140
Effective volume (m ³)	0.06	0.32	0.59	1.09	1.85	2.8	3.96	5.21	6.43	8.08	9.46	10.75	12.18
Speed range (rpm)	5~20	5~20	5~20	5~20	5~20	5~10	5~10	5~10	5~10	1~8	1~8	1~8	1~8
Transmission power (kW)	2.2	4	5.5	7.5	11	18.5	30	37	45	55	75	90	110
Device width (m)	306	584	762	940	1118	1296	1474	1655	1828	2032	2210	2480	2610
Overall width (m)	736	841	1066	1320	1474	1676	1854	2134	2186	2438	2668	2732	2935
Equipment length (m)	1956	2820	3048	3328	4114	4724	5258	5842	6020	6124	6850	7500	7860
Total length (m)	2972	4876	5486	5918	6808	7570	8306	9296	9678	9704	10300	11800	12900
Center height E	380	450	534	610	762	915	1066	1220	1430	1560	1650	1760	1856
Total equipment height H (m)	762	838	1092	1270	1524	1778	2032	2362	2464	2566	2668	2769	2838

Descriptions

High efficiency multifunctional full closed vertical vacuum drying device integrating drying, crushing, vacuum distillation and powder mixing. Its drying efficiency is 1-2 times than the same size "double cone rotary vacuum dryer".



Features

- ◆Strong applicability: combined with the company's special drying process, can adapt to the viscosity, poor thermal penetration, easy ball, easy to hold together into a block of dry material.
- ◆Production capacity: large capacity, the largest container can reach the effective volume of 80%.
- ◆The high drying efficiency: effective heat transfer area, the container is 1.4 times the area of the material in the container; a spiral ascending, and then along the main axis of vortex was decreased, in the decentralized movement in uniform and effective heating head; high vacuum and high speed airflow at the bottom of combined with the material, solvent, away; dual channel vacuum pipe vacuum, to prevent clogging, reduce resistance, increase the pumping rate.
- ◆It does not damage the material and product form: high requirements for heat sensitive products, shaped materials are not damaged. The drying process is fully sealed with nitrogen protection, no cross contamination, high cleanliness and high safety level. The gap between the mixer and the container wall is small, which can effectively prevent the material from sticking on the surface of the wall of the device.
- ◆It meets the production requirements of sterile APIs: optional SIP and CIP online cleaning and online aseptic sampling. Sealed with the upper and lower process, the entire production process sealed production, to meet the requirements of the new version of GMP production.

Technical Parameter

Item	GLZ-500	GLZ-750	GLZ-1000	GLZ-1250	GLZ-1500	GLZ-2000	GLZ-3000	GLZ-4000
Effective volume	500	750	1000	1250	1500	2000	3000	4000
Full volume	650	800	1220	1600	1900	2460	3680	4890
Heating area(m ²)	4.1	5.2	7.2	9.1	10.6	13	19	22
Motor power(KW)	11	11	15	15	18.5	22	30	37
Net weight of equip (Kg)	1350	1850	2300	2600	2900	3600	4100	4450
Stirring speed(rpm)	50	45	40	38	36	36	34	32
Total height of equipment H(m)	3565	3720	4165	4360	4590	4920	5160	5520
Height of vessel H3	1455	1610	1965	2160	2300	2590	2380	3160
Height of ear holder H4	895	995	1315	1480	1630	1860	1900	2240
Inside width of pot D2	1100	1200	1400	1500	1600	1750	2100	2100
Width of mounting ear base D3	1270	1350	1560	1720	1900	2050	2400	2450



Descriptions

CT-C series hot air circulation drying oven uses low noise and high temperature proof axial flow blower and an automatic temperature control system. The whole circulation system is the fully enclosed to make that the heat efficiency of the drying oven increases from 3-7% of the traditional drying oven to 35-45% of the present one. The highest heat efficiency can reach 50%. The successful design of CT-C hot air circulation drying oven makes that the hot air circulation drying oven in our country catch the advanced level both at home and abroad. In order to save a large quantity of the energy in our country, in order to enhance the economic results of the enterprises, in 1990, the medicine management bureau of the State issued the industry standard and the uniform type is RXH.



Applications

It is suitable for heating and solidification, drying and dehydration of raw materials in pharmaceutical industry, chemical industry, foodstuff industry, agricultural and sideline products, aquatic products, light industry, heavy industry and so on. The raw materials can be medicine raw materials, Chinese traditional medicine, tablet of drink, immersed elctuary, powder, granule, packing bottle, pigment, dyestuff, dehydration vegetable, dried fruit and melons, banger, plastic resin, electric elements, drying varnish and so on.

Technical Parameter

Number	Model	YY026-90 Field standard model	Technical data										Accessories			Total weight (kg)
			Evaporator area (m ²)	Efficient volume (m ³)	drying capacity (kg/dwt)	Radiator area (m ²)	Steam consumption (kg/h)	Electric heating power (kw)	Fan volume (m ³ /h)	Fan power (kW)	Temperature difference inside the oven (°C)	Overall dimensions W×D×H (mm)	Equipped drying cart (set)	Drying pallet size (optional) (kg)	Temperature automatic control box	
1	CT-C-O	RXH-7-C	7.1	1.3	60	10	10	6	3450	0.45	±1	1380×1200×2000	1	24	Available	820
2	CT-C-I	RXH-14-C	14.1	2.6	120	20	18	15	3450	0.45	±2	2260×1200×2000	2	48	Available	1580
3	CT-C-II	RXH-27-C	28.3	4.9	240	40	36	30	6900	0.45×2	±2	2260×2200×2000	4	96	Available	1800
4	CT-C-III	RXH-27-C	28.3	4.9	240	40	36	30	6900	0.45×2	±2	4280×1200×2270	4	96	Available	1880
5	CT-C-III	RXH-41-C	42.4	7.4	360	80	60	45	10350	0.45×3	±2	2260×3200×2000	6	144	Available	2100
6	CT-C-III	RXH-41-C	42.4	7.4	360	80	60	45	10350	0.45×3	±2	3240×2200×2000	6	144	Available	2210
7	CT-C-IV	RXH-54-C	56.5	10.3	480	120	80	60	13800	0.45×4	±2	4280×2200×2270	8	192	Available	2800
8	CT-I	RXH-14-B	14.1	2.6	120	23	20	15	3450	1.1	±2	2480×1200×2375	2	48	None	1220
9	CT-II	RXH-27-B	28.3	4.9	240	48	40	30	5230	1.5	±2	2480×2200×2438	4	96	None	1530
10	CT-III	RXH-41-B	42.4	7.4	360	72	60	45	9800	2.2	±2	3430×2200×2620	6	144	None	2110
11	CT-IV	RXH-54-B	56.5	10.3	480	96	80	60	11800	3	±2	4460×2200×2620	8	192	None	2300

Outer wall materials of the oven(A3 steel), inner wall materials:aluminum alloy, stainless steel, drying cart materials:A3 steel, stainless; drying pallet materials:aluminum stainless steel, galvanized sheet.

Scope of application

It is suitable for drying heat sensitive raw materials of pharmaceutical industry, chemical industry, foodstuff industry, electronic industry, Chinese herb medicine industry, etc.

Features

- ◆ It can get higher drying speed at lower temperature and the heat energy can be used fully.
- ◆ It can dry at low temperature or can dry heat sensitive raw materials.
- ◆ It can dry raw materials that contain solvent and the solvent needs to recover.
- ◆ Before drying, it can carry out disinfectant treatment. during the period of drying, any impurity can not enter in it.
- ◆ The dryer belongs to static vacuum dryer, the shape and volume of raw materials can not be damaged.



Technical Parameter

Name	Model	YZG-600	YZG-800	YZG-1000	YZG-1400A	FZG-10	FZG-15	FZG-20
Inner size of drying chamber, mm		Φ600×976	Φ800×1320	Φ1000×1530	Φ1400×2080	1500×1040×1200	1500×1400×1200	1500×1800×1200
Outer size of drying chamber, mm		750×950×1050	950×1210×1350	1150×1410×1600	1550×1900×2150	1676×1700×1564	1676×2060×1564	1676×2500×1564
Layers of baking support		4	4	5	8	5	8	12
Interval, mm		85	100	100	100	120	120	120
Size of baking tray, mm		310×600×45	460×640×45	460×640×45	460×640×45	460×640×45	460×640×45	460×640×45
Quantity of baking tray		4	4	10	32	20	32	48
Working pressure inside the pipe of baking support, MPa		≤0.784	≤0.784	≤0.784	≤0.784	≤0.784	≤0.784	≤0.784
Operation temperature of baking support, °C		35-150	35-150	35-150	35-150	35-150	35-150	35-150
Degree of vacuum inside the chamber when operation in idle, Mpa		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1
Under the condition of -0.1 Mpa and 110°C, evaporation rate of water, kg/m ² ·hr		7.2	7.2	7.2	7.2	7.2	7.2	7.2
When condenser is used, Model and power of vacuum pump, kw		2X-15A 2KW	2X-30A 3KW	2X-30A 3KW	2X-70A 5.5KW	2X-70A 5.5KW	2X-70A 5.5KW	2X-90A 7.5KW
When condenser is not used, Model and power of vacuum pump, kw		SK-0.5 1.5KW	SK-1 2.2KW	SK-1 2.2KW	SK-1 5.5KW	SK-2 4KW	SK-2 5.5KW	SK-2 5.5KW
Weight of drying chamber, kg		250	600	800	1400	1400	2100	3200

Features

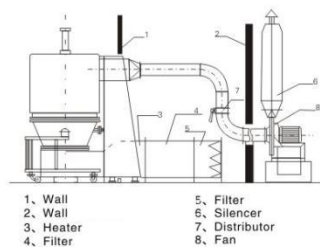
- ◆ The structure of fluidized bed is round so as to avoid dead corner; Inside the hopper there is a stirrer in order to avoid agglomeration of raw material and forming canal of flow;
- ◆ The granule is discharged through the method of turning over. In this way it is very convenient and full. The discharging system can be designed as request too;
- ◆ It is operated at the conditions of negative pressure and seal. The air is filtered. Therefore it is simple in operation and convenient in clean. It is an ideal equipment that is in conformity with the requirements of GMP;
- ◆ The drying speed is fast and the temperature is uniform. In general the drying time is 15-45 minutes for each batch.



Applications

- ◆ Extruded granule, swayed granule, and granulate granule using the methods of humidity, high speed and mixing;
- ◆ Suitable for drying humidity block or powder raw material in the fields such as pharmaceutical, foodstuff, feedstuff, the chemical industries and so on;
- ◆ The raw material is large in granule and small in bolck and having adhesive lump materials;
- ◆ Suitable for raw materials, its volume will be changed when dry, such as konjac, polyacrylamide, etc.

Sketch of structure



Technical Parameter

Item	Unit	Type							
		60	100	120	150	200	300	500	
raw material	Kg								
Fan	Air volume	m ³ /h	2361	3488	3400	4901	6032	7800	10800
	Air pressure	mmH ₂ O	594	533	533	679	787	950	950
	Power	kw	7.5	11	15	15	22	30	45
	Stirring power	kw	0.55	0.55	0.55	0.55	0.55	0.75	1.1
	Stirring speed	r.p.m	11						
	Consumption of steam	Kg/h	141	170	170	240	282	366	451
	Time of operation	min	15-30						
Height of main machine	Square	mm	2750	2850	2850	2900	3100	3300	3650
	Round	mm	2700	2900	2900	2900	3100	3600	3850

Applications

The machine is mainly used for drying powder or granule in pharmaceutical, foodstuff and chemical industries and so on.

Features

- ◆ Fluidized drying, heat mass transfer is fast;
- ◆ Operate under closed and negative pressure, nodust flying;
- ◆ Adopt antistatic filter material, operate safety;
- ◆ The equipment has no dead angle, clean thoroughly, no cross cantamination;
- ◆ Meet the GMP specification requirement.



Technical Parameter

item	type									
	unit		3	5	30	60	120	200	300	500
container of raw material	dim.	mm	300	400	700	1000	1200	1400	1600	1800
	volume	L	12	22	100	220	420	670	1000	1500
production capacity	min	kg/batch	1.6	4	15	30	80	100	150	250
	max	kg/batch	4	6	36	72	140	240	360	600
consume of steam		kg/batch	12	23	70	140	211	282	366	465
amount of compressed air		m ³ /min	0.3	0.3	0.3	0.6	0.6	0.9	1.1	1.6
Power of fan		kw	2.2	4	5.5	11	18.5	22	30	45
Temperature		°c	120°C							
Yield		%	>99							
Option time		min	15-30							
Content at final term.		%	-0.2							
Noise		dB	≤75							
Height of main machine		mm	2100	2300	2500	3000	3300	3800	4000	4400



Principle of work

The powder granule in the container (fluidization) appear in the state of fluidization. It is preheated and mixed with chen and heated air. At the same time the solution of adhesive solvent is fogged and sprayed into the container. It makes the some particles become granulating that contains adhesive. Being of unceasing dry through hot air, the moisture in the granulation is evaporated and the adhesive is solidification. The process is carried out continuously. Finally it forms ideal, uniform and Porous granules.



Features

- ◇ Because of powder Granulation, the fluidity is improved and the dust is reduced;
- ◇ Because of powder Granulation, its solving property is improved;
- ◇ The mixing, Granulation and drying can be completed in one step inside the machine;
- ◇ The operation of equipment is safe because the anti static filtering cloth is adapted;
- ◇ The operating personnel can not be damaged if explosion take place because there is explosive releasing hole;
- ◇ The equipment has no dead corner. Therefore the loading and unloading are quick and light and clean. It can meet the requirements of GMP.

Technical Parameter

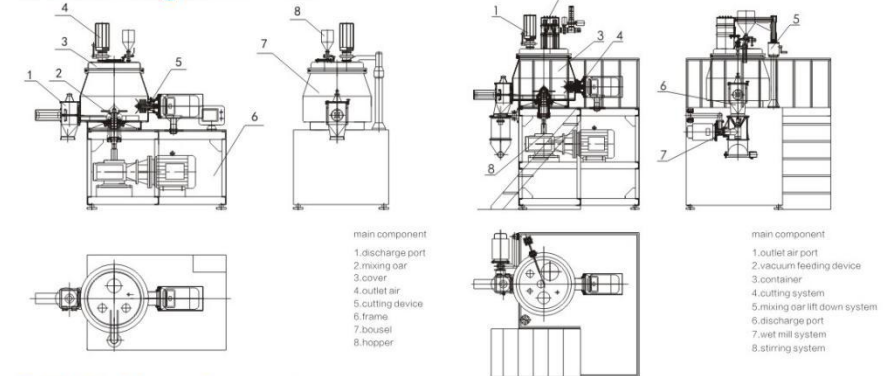
Item	Unit	type										
		3	5	15	30	60	120	200	300	500		
Container	Volume	L	12	22	45	100	220	420	670	1000	1500	
	Diameter	mm	300	400	550	700	1000	1200	1400	1600	1800	
Capability	Min	Kg	1.5	4	10	15	30	80	100	150	250	
	Max	Kg	4.5	6	20	45	90	160	300	450	750	
Fan	Capacity	m ³ /h	1000	1200	1400	1800	3000	4500	6000	7000	8000	
	Pressure	mmH ₂ O	375	375	480	480	950	950	950	950	950	
	Power	kw	3	4	5.5	7.5	11	18.5	22	30	45	
Steam expenditure		Kg/h	15	23	42	70	141	211	282	366	451	
Compressed air expenditure		m ³ /min	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.5	1.5	
Weight of the main body		Kg	500	700	900	1000	1100	1300	1500	1800	2000	
Steam pressure		Mpa	0.3 ~ 0.6									
Temperat		°C	(adjustable at the range from room temperature to 120°C)									
Working time		min	45 ~ 90 (decided in accordance with the propletries of raw materials)									
Field		%	≥99									
Noise		dB(A)	≤75dB(A)(When installation,main machine is separated from fan)									
Size(L × W × H)		m	1.0 × 0.6 × 2.1	1.2 × 0.7 × 2.1	1.25 × 0.9 × 2.5	1.6 × 1.1 × 2.5	1.85 × 1.4 × 3	2.2 × 1.65 × 3.3	2.34 × 1.7 × 3.8	2.8 × 2.0 × 4.0	3 × 2.25 × 4.4	

Descriptions

GHL high speed mixer granulator is a high efficiency equipment that can mix different powder materials and granulate granule in one procedure. It is widely used for pharmaceutical industry, foodstuff industry and chemical industry, etc.

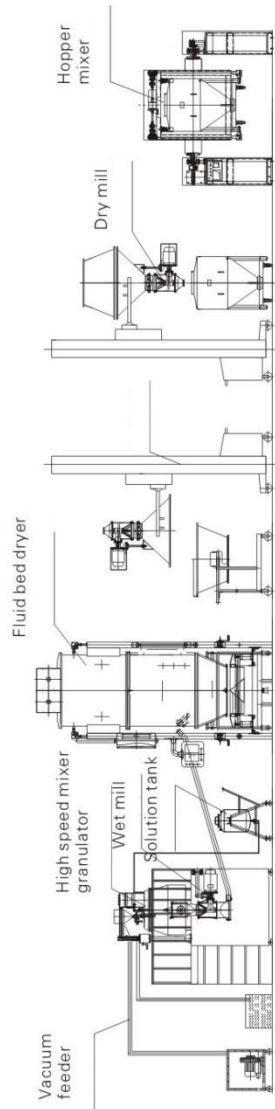


installation diagram



Technical Parameter

item	specifications	7/2.5	10	50	100	150	200	250	300	400	600	800-1500	
Capacity (Kg / batch)		0.3-1	3	15	35	50	60	80	100	135	200	By client	
Granules size (Mesh)		20-80											
Working time (min)		5-7											
Container volume (L)		7/2.5	10	50	100	150	200	250	300	400	600		
Mixing power (Kw)		0.75	2.2	4/5.5	6.5/8	6.5/8	11/14	11/14	13/16	18.5/22	22/28		
Cutting power (Kw)		0.75	1.1	1.3/1.8	2.4/3	2.4/3	4.5/5.5	4.5/5.5	4.5/5.5	6.5/8	9/11		
Mixing speed (r/min)		30-1000	30-600	200/400	200/400	180/270	180/270	180/270	140/220	106/155	80/120		
Cutting speed (r/min)		300-3000	1500/3000										
Pressure of compressed air (Mpa)		0.3-0.6											
Consumption of compressed air (m ³ /min)			0.1	0.11	0.13	0.2	0.25	0.25	0.3	0.4	0.4		
Weight (Kg)		150	300	400	800	900	1200	1500	1550	1650	1800		
Overall dimension of machine (L × W × H) mm		800 × 450 × 900	1250 × 550 × 1160	1730 × 750 × 1610	1950 × 750 × 1810	1950 × 750 × 1810	2210 × 880 × 2000	2210 × 880 × 2000	2310 × 1050 × 2000	2485 × 1050 × 2050	2585 × 1400 × 2100		



After the material is weighed, the material is sucked into the wet mixing granulator through the vacuum feeding machine by negative pressure. The adhesive liquid is sprayed into mist and mixed with fine powder to get soft material in the wet mixer/granulator. Meanwhile, the soft material is made into the wet granule by granulating blade. After the wet granule is evenly mill by wet mill, the fine wet particles are sucked into the fluid bed dryer for drying under the function of fluid bed dryer's vacuum negative pressure, the wet material sucked to fluid bed dryer for drying, the dried material discharged by hopper lifter for dry mill, then mixing in the hopper mixer before entering the other processes.



Features

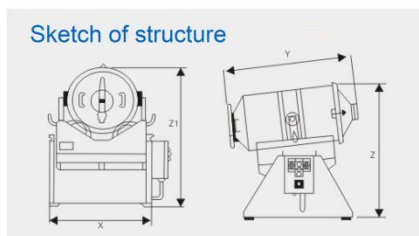
- ◆Through the vacuum conveyor for the machine, send the powder or grain state materials into the double-taper container, or send the materials into the container manually.
- ◆As the container rotates continuously, the materials moves complexly in the container so as to get the uniform mixing.

Applications

It is suitable for mixing the powder and grain state materials in the pharmacy, chemical food, building material and other industries.

Technical Parameter

Model	Total volume (m ³)	Productive capacity (kg/批)	Mixing time (min)	Revolution of cylinder (rpm)	Power (kw)	Overall dimension(mm)	Rotation height (mm)	Weight (kg)
180	0.18	72-90	6-15	12	1.1	1400 × 800 × 1850	1850	280
300	0.3	120-150	6-15	12	1.1	1685 × 800 × 1850	1850	310
500	0.5	200-250	6-15	12	2.2	1910 × 800 × 1940	1950	550
1000	1.0	400-500	6-15	12	4	2765 × 1500 × 2370	2460	810
1500	1.5	600-750	6-15	12	5.5	2960 × 1500 × 2480	2540	980
2000	2.0	800-1000	6-15	12	7.5	3160 × 1900 × 3500	3590	1500
2500	2.5	1000-1250	8-20	12	7.5	3386 × 1900 × 3560	3650	2150
3000	3.0	1200-1500	8-20	7.8	7.5	4450 × 2200 × 3600	3700	2500
4000	4.0	1600-2000	8-20	7.8	11	4750 × 2500 × 3680	3730	3200



Descriptions

- ◆The mixers are widely used in pharmaceutical, chemical, food, dye, feed, chemical fertilizer and pesticide industries and especially suitable for mixing various solid materials with large volume(1000L-10000L).
- ◆The mixing barrel swings while rotates so that the materials in the barrel can be fully mixed. Because the discharge port of the barrel is out of the barrel centreline, the mixer features quick mixing and discharging, as well as high volume mixing capacity.

Technical Parameter

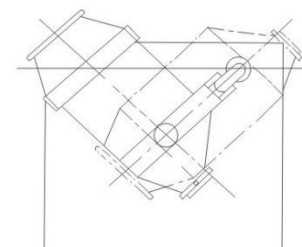
Type	Barrel volume (L)	Loading capacity (L)	Max Loading weight (kg/批)	No. of swing& rotation (r/min)	Total motor power(kw)	Overall dimensions X × Y × Z, (mm)	Total weight (kg)	Barrel weight (kg)
EYH-60	60	30	15	50	0.4	700 × 730 × 1100 × 990	115	15
EYH-150	150	75	37.5	37	1.15	800 × 1050 × 1450 × 1340	190	50
EYH-300	300	150	75	30	1.15	900 × 1350 × 1550 × 1400	340	60
EYH-600	600	300	150	23.6	3	1170 × 1640 × 2050 × 1910	1150	140
EYH-800	800	400	200	19.8	3	1320 × 1950 × 2150 × 2000	1600	200
EYH-1000	1000	500	250	19.8	3	1300 × 2980 × 1894 × 1766	1700	240
EYH-1500	1500	750	375	16.2	4.4	1500 × 3195 × 2250 × 2008	2000	320
EYH-2000	2000	1000	500	16.2	7.4	1660 × 3305 × 2255 × 2120	2600	430
EYH-3000	3000	1500	750	13.8	11	1860 × 3860 × 2570 × 2420	3500	620
EYH-4000	4000	2000	1000	12.8	13	2010 × 4100 × 2755 × 2550	4100	700
EYH-6000	6000	3000	1500	11.2	18.5	2280 × 4965 × 3172 × 2935	6100	1100
EYH-8000	8000	4000	2000	10.4	22	2500 × 5200 × 3655 × 3200	7900	1450
EYH-10000	10000	5000	2500	9	30	2600 × 5500 × 3750 × 3400	9500	1650

Principle of work

- ◆During the period of operation, because the mixing drum has multidirectional actions of motion, it speeds up the fluid and diffused effect of raw material. Meanwhile it avoids the phenomenon of segregation and accumulation caused by centrifugal effect in ordinary mixer and no dead corner. It can guarantee the best quality of mixed raw material.
- ◆Structure: this machine consists of stand, transmission system, electric control system, multi-directional motion mechanism, mixing drum and so on. The mixing drum contacted with raw material is made of stainless steel. The inner and outer wall of drum is polished.



Sketch of structure



Applications

This machine is suitable for many industries such as pharmaceutical industry, chemical industry, metallurgy industry, foodstuff industry, architecture industry and institutes, it can mix powder and granule raw materials having good fluidity and make the mixed raw materials reach the best mixing state.

Features

- ◆Because the mixing drum has multi directional motion, it makes raw material inside the drum has many cross-mixing points, therefore the mixing effect is good. Its degree of uniformity may be over 99.9%. Its Max loading efficiency may be 0.9 (The loading efficiency of ordinary mixer is 0.4 - 0.6). Its mixing time is short and its efficiency is high.
- ◆The design of mixing drum is unique. Its inner wall is polished finely.
- Its advantages are no dead corner, no pollution to raw material, convenient in discharge, easy in clean and so on.

Technical Parameter

type	SYH-5	SYH-100	SYH-200	SYH-400	SYH-600	SYH-800	SYH-1000
Material barrel volume (L)	5	100	200	400	600	800	1000
Max loading volume (L)	4.25	85	170	340	510	680	850
Max loading weight (kg)	5	80	150	200	300	400	500
Spindle rotation speed (r/min)	24	15	12	10	10	10	10
Motor power (kw)	0.37	2.2	3	4	5.5	7.5	11
Overall dimensions (mm)	600 × 1000 × 1000	1200 × 1800 × 1500	1300 × 1600 × 1500	1500 × 2200 × 1500	1850 × 2500 × 1650	1900 × 2400 × 2100	1950 × 2500 × 2400
Weight (kg)	150	500	750	1200	1500	1650	1800



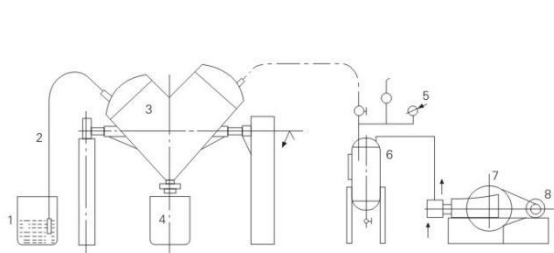
Descriptions

This machine is suitable for mixing two or more dry and powder or granule raw materials from pharmaceutical industry, chemical industry, foodstuff industry and so on.

The structure of this machine is unique. Its mixing efficiency is high and no dead corner. It is made of stainless steel. Its inner and outer wall is processed through polishing. Its appearance is beauty. mixing effect is uniform. Its scope of application is wide. The forced stirrer can also be equipped in order to meet the requirements of raw materials that contain fine powder, cake and certain moisture as request.



Sketch of structure



1. Cylinder of raw material
2. Cylinder of sucked raw material
3. Mixer
4. Cylinder of discharged raw material
5. Vacuum meter
6. Tank of air purification
7. Vacuum pump
8. Motor

Technical Parameter

Model and specification	0.18	0.3	0.5	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6
Productive capacity (kg/time)	72	120	200	400	1600	800	1000	1200	1600	2000	2400
Model of vacuum pump	W2	W2	W2	W3	W3	W3	W3	W4	W4	W4	W4
Time of raw material fed in (min)	3-5	3-5	4-6	6-9	6-10	8-13	8-15	8-12	10-15	15-20	18-25
Mixing time (min)	4-8	6-10	6-10	6-10	6-10	6-10	6-10	8-12	8-12	8-12	8-12
Total volume (m ³)	0.18	0.3	0.5	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0
Stirring speed (r/min)	12	12	12	12	12	12	12	10	10	10	10
Power of motor (kw)	1.1	1.1	2.2	4	4	5	7.5	7.5	11	15	18.5
Rotating height (mm)	1580	1760	2400	2840	3010	3240	3680	3700	4350	4800	5300
Weight (kg)	280	320	550	950	1020	1600	2040	2300	2800	3250	3850

Descriptions

Model YK160 series swing type granulator is a new special equipment for the granulating and material-spreading of belt type drier, which is designed on the basis of customers requirements and is in accordance with the currently malpractices. We also referred to the characteristics of belt type drier, digested and absorbed its advanced technologies, and we also brought forth new ideas to the designs. This equipment has the features of a reasonable and simple structure, sufficient utility of energy, an advanced granulating energy-saving and etc, truthed, nach muti eniles and thus granulating, grinding and material distributing are suitable for granulating _in pharmaceutical industry, chemical industry, foodstuff industry and etc. The most remarkable advantage of the equipment is that the granulating speed can be changed in a certain range and the material can be distributed uniformly. Thus it can keep the damp granule or dry granule in an identical size. The granules from this machine is uniformly and little in dust, convenience in operation, longlife in use, it can meet GMP requirements.



Technical Parameter

Model	Productive capacity (kg/batch)	Total volume (m ³)	Feeding rate	Power bulk density	Material size (mesh)	Motor power (kw)	Mixing time (min)	Overall dimensions (mm)	weight (kg)
DSH200	95	0.2	0.6	~0.8	20-250	2.2	6-10	890 × 1850	600
DSH500	190	0.5	0.6	~0.8	20-250	2.2	6-10	1160 × 2250	800
DSH1000	380	1	0.6	~0.8	20-250	4	8-10	1450 × 2700	1200
DSH2000	720	2	0.6	~0.8	20-250	5.5	8-10	1850 × 3450	1800
DSH4000	1400	4	0.6	~0.8	20-250	11	8-10	2260 × 4210	3000

30B Series High Effect Grinding Machine(set) WF-30B China Herb High Speed Grinding Machine(set)

Descriptions

This machine(set) is extensively used in pharmaceutical, chemical food and pesticide industries for pulverizing dry brittle materials.



Technical Parameter

Model	20B/20B(set)	30B/30B(set)	40B/40B(set)	60B/60B(set)	WF30B/WF30B(set)
Productive capacity (kg/h)	60-150	100-300	160-800	500-1500	50-250
Revolution of main shaft (r/min)	4500	3800	3400	2800	5300
Size of fed material (mm)	6	10	12	15	10-40
Grinding size (mesh)	2-120	2-120	2-120	2-120	60-220
Power of Motor (kw)	4	5.5	7.5	15	7.5
Fan power	0.75	0.75	1.1	2.2	1.1
Weight (kg)	250	320	550	680	

Notes: the outputs in list are only for reference, due to the difference of material and the wanted sizes.

