

Warning: In this handbook all equipment, Without our company officially allowed, strictly prohibits carrying on the production or the production flammable explosive product in the flammable explosive environment.

In this handbook related content, our company take charge of all have as necessary to it carry on authority of the change, even slightly not separate informs.

In this handbook related equipment, the heat source permission use hot water, the heat conduction oil, strictly prohibit the use steam, if has the need please when the ordering informs us.

CHANGZHOU YIMIN DRYING EQUIPMENT CO.,LTD



常州市益民干燥设备有限公司

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益民

国家高新技术企业
江苏省知名企业(品牌)
ISO9001:2008认证企业
常州市知名商标
外贸自营进出口企业
AAA级资信企业
AAA级合同信用企业
江苏省民营科技企业
中国制药装备行业协会会员

Company Introduction

简介



第一生产基地

常州市益民干燥设备有限公司坐落于中国干燥业的发源地，常州市焦溪镇工业园区，毗邻京沪高速、沪宁铁路、沪宁高速横山道口 5 公里，是中国干燥行业及制药机械重点骨干企业。

公司总占地面积达到 3.8 万余平方米，建筑面积 2.6 万余平方米，拥有现代一流的大型生产车间及设备，固定资产 2850 万元人民币，员工 160 余人。公司创始人范逸明先生十多年来一直致力于干燥设备的研制，生产和经营，同时也汇集了一批科研、设计、生产、服务于一体的高素质人才，并长期同有关大专院校实行横向合作，对产品不断进行更新与开发。

目前公司拥有加工设备 180 多台（套），技术力量雄厚，年产各类干燥、混合、制粒、粉碎、除尘、筛粉等设备 1500 多台（套）。产品已发展到干燥系列 300 多个规格和品种，广泛用于制药、化工、食品、饲料、矿产、农副产品、电子、轻工等行业，产品遍及全国、远销美国、日本、俄罗斯、香港、台湾等地。

我公司备有各种试料样机，并欢迎新老客户带料试验和考察，同时公司聘请了中国干燥技术顾问潘永康教授，解决疑难物料的干燥及设计，并索取相关资料。益干品牌、有口皆碑”益干人“诚挚问候各界同仁。

ChangZhou Yimin drying equipment Co.,Ltd. is located in the cradleland of Chinese drying industry,Jiaoxi Industrial park, Changzhou City. Our company is near by Jinghu highway, Huning railway, and just 5km far away from Hengshan entry of Huning highway. Also,we are the main enterprise of Chinese drying industry and pharmaceutical machine.

Our company has about 38,000m² floorspace, With26000m² area of the structure, 28.5 millionRMB fixed assets,160

employees.The company's founder, Mr.Yiming fan was always engaged in development, production, and management in the last 10 years and marshal many high level people, such as scientific research, designing, production, service. Meanwhile,our company establish long-term cooperation relationship with some Univerity to update and develop our product constantly.

So far, we own more than 180 process equipments. With the strong technical ability, we can produce 1500 kinds of drying, mixing,granulating,grinding,filter,sieving equipments. Our product has 300 types in the drying series, which have been widely used in pharmaceutical, chemical, foodstuff,feedstuff,mine production, faHning byproduct, electron, and light industries. Our product has covered all over the country, and some are sell to America, Japan, Russia, HongKong, and Taiwan.

Our company prepared all kinds of sample machines and welcomes all customers to test and examine.

"Yigan brand,Win universal praise"

"Yigan people",Greet all fellow workers sincerely!



第二生产基地



企业规模 < Scale.....



我们一直秉承严格的质量管理体系，每一件产品从设计到发货质量保证体系贯穿始终，客户拥有的不仅仅是产品，更多的是对产品质量的承诺

以人为本，科技和管理并举，创造一流的产品是公司的努力方向



企业资质

Enterprise Aptitude



TYPICAL CLIENTS





CONTENT TABLE (Input the listed page number in search bar for details)

干燥设备系列 Dryers series

- 8 CT、CT-C型热风循环烘箱 CT、CT-C Model Hot Air Circle Oven
- 11 YZG(圆)、FZG(方)型真空干燥机 YZG(round)、FZG(square)Model Vacuum Dryer
- 13 SZG型双锥形回转式真空干燥机 SZG Double Conical Revolving Vacuum Dryer
- 15 ZB型真空耙式干燥机 ZB Model Vacuum Harrow Dryer
- 16 ADY活性酵母干燥机 ADY Active Yeast Dryer
- 17 FG型沸腾干燥机(立式) FG Model fluidized dryer(vertical type)
- 18 BLGZ型系列闭路式干燥、冷却机 BLGZ series Fully Closed Fluid Bed Dryer
- 21 GFG型高效沸腾干燥机 GFG Model High Effective Fluidizing Dryer
- 22 XF型箱式沸腾干燥机 XF Model Box-shaped Fluidizing Dryer
- 24 ZLG型振动流化床 ZLG Model Line Vibration Fluidizing Bed Dryer
- LZG螺旋振动干燥机 LZG Helix Vibration Dryer
- 26 DW系列带式干燥机 DW Model Belt Dryer
- DW-A系列带式干燥机 DW-A Model Belt Dryer
- 27 DW-B型带式干燥机 DW-B Model Belt Dryer
- 28 DW3-B型带式干燥机 DW3-B Model Belt Dryer
- 29 XSG型旋转闪蒸干燥机 XSG Model Revolving Flash Vaporization Dryer
- 32 QG、JG型气流干燥机 QG And JG Model Air Stream Dryer
- 35 ZLPG型中药浸膏喷雾干燥机 ZLPG Model Chinese Herbal Medicine Extract Spraying Dryer
- 37 LPG型离心式喷雾干燥机 LPG Model Centrifugal Atomizing Dryer
- 41 YPG型压力式喷雾造粒干燥机 YPG Model Pressure Atomizing Granulating Dryer
- 43 HG型滚筒刮板干燥机 HG Model Roller Scraper Dryer
- 44 HZG型滚筒干燥机 HZG Model Rotary Drum Dryer
- 47 PLG型盘式连续干燥机 PLG Model Continuous Plate Dryer
- 50 KJG型空心桨叶干燥机 KJG Model Hollow Blade Paddle Dryer

制粒设备系列 Granulator Series

- 53 FL型沸腾制粒机 FL Model Fluidized Granulator
- 55 FLP型流化造粒包衣机 FLP Fluid-bed Granulator Pelletor Coater
- 57 PGL-B型喷雾干燥制粒机 PGL-B Model Spray Drying Granulator
- 58 GHJ型高效湿法混合制粒机 GHJ Model High Speed Mixing Granulator
- 60 干式制粒机 Dry Granulator
- 61 GZL型干粉制粒机 GZL Model Powder Rolling Machine
- 63 JZL挤压造粒机 JZL Series Extruding Granulating Machine

- 64 SE系列螺杆挤出造粒机 SE Model Screw Extruding Pelleter
- 65 QZL型球形抛丸机 QZL Pelletizer
- 66 YK160型摇摆式颗粒机 YK 160 Swaying Granulator
- 66 KZL系列快速整粒(粉碎)机 KZL Swries High-Speed Grinding Granulator

混合篇系列 Mixer series

- 68 SYH系列三维运动混合机 SYH Series Three Dimensional Mixer
- 69 EYH型二维运动混合机 Model EYH Planar Motion Mixer
- 70 VH系列V型高效混合机 Model VH High Effective Mixer
- 71 VI型强制型搅拌系列混合机 Model VI High Effective
- 71 SZH系列双锥混合机 SZH Series Doubletapered Mixer
- 72 DSH系列双螺杆锥形混合机 DSH Series Double Screws Cazone Mixer
- 73 WLDH卧式螺带混合机 Model WLDH Series Hedzontal Ribbon Mixer
- 74 CH系列槽形混合机 Model CH Series Slot Shape Mixer
- 74 GHJ 高速混合机 GHJ high Speed Mixer
- 75 HGC系列固定料斗混合机 HGC Series Fixed Hopper Mixer

粉碎、分筛及其他配套系列 Grinder/Sieve/others

- 77 B系列万能粉碎机 B Series Universal Grinder
- 77 B-X系列万能粉碎机组 B-X Series Effective And Universal Grinder
- 78 WFJ系列微粉碎机 CWFJ系列超微粉碎机 Model WFJ Series Fine Grinder Model CWFJ Series Super Fine Grinder
- 79 PSJ-500型破碎机 Model PSJ-500 Crusher
- 79 CSJ系列粗粉碎机 Model CSJ Series Roughness Crusher
- 80 ZS系列振荡筛 Model ZS Series Vibration Sieve
- 80 ZS-800, 1000, 1500型振动筛 Model ZS-800,1000,1500 Vibrating Sieve
- 81 FS系列方形筛 Model FS Series Square Sieve
- 82 SRZ型散热器(绕片式散热器) SRL型散热器(钢铝轧制散热器)
- 82 SRZ Model Radiator(Coiled Pieces Radiator) SRL Model Radiator(Rolled Aluminum and Steel Radiator)
- 83 JRF系列燃煤热风炉 Model JRF Series Coal Fuel Hot Air Furnace
- 84 JRFY系列燃油、燃气热风炉 Model JRFY Series Oil Fuel,Gas Fuel Hor Air Furnace
- 85 JRML系列链条炉排燃煤热风炉 JRML Series Coal Furnace of China
- 86 MC系列脉冲布袋除尘器 MC Series Pluse Filter With Hop-Pocket

Drier Series

干燥设备系列



CT、CT-C型热风循环烘箱 CT、CT-C Model Hot Air Circle Oven

特点 Features

大部分热风在箱内循环，热效率高，节约能源。

利用强制通风作用，箱内设有可调式分风板，物料干燥均匀。热源可采用蒸汽、热水、电、远红外，选择广泛。

整机噪音小，运转平稳。温度自控，安装维修方便。

适用范围广，可干燥各种物料，是通用干燥设备。

Most of hot air is circled inside the oven. The hot efficiency is high. The energy source can be saved.

It used enhanced ventilation and equipped with adjustable air divider plate inside the oven. Raw materials can be dried evenly. The hot sources can be steam, hot water, electricity of far infrared.

The machine has low noise and stable operation. The temperature can be controlled automatically. The installation and maintenance are very convenient.

The applied fields are wide and can be suitable for all kinds of raw materials. It is a comprehensive dryer.



应用范围

热风循环烘箱适用于制药、化工、食品、农副产品、水产品、轻工、重工等行业物料及产品的加热固化、干燥脱水。如原料药、中药、中药饮片、浸膏、粉剂、颗粒、冲剂、水丸、包装瓶、颜料、染料、脱水蔬菜、瓜果干、香肠、塑料树脂、电器元件、烘漆等。

Scope of application

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 medicines of raw materials, Chinese traditional medicines, tablet of drink, immersed electuary, powder, granule, packing bottle, pigment, dyestuff, dehydration vegetable, dried fruit and melons, banger, plastic resin, electric elements, drying varnish and so on.



CT、CT-C型热风循环烘箱 CT、CT-C Model Hot Air Circle Oven

主要技术参数 Main Technical Parameters

序号 No.	型号 Model	行业标准 YY0026-90 型号 Field standard model	技术参数 Technical data								配件 Accessories			总重量 Total weight (kg)	
			蒸发面积 Evaporation area (m ²)	有效容积 Efficient volume (m ³)	每次干燥量 (kg/批) drying capacity (kg/batch)	耗用蒸汽 Steam consumption (kg/h)	散热器 面积 Radiator area (m ²)	电加热功率 Electric Heating power (kw)	风机风量 Fan volume (m ³ /h)	风机电功率 Fan power (kw)	外形尺寸 宽×深×高 Overall dimensions W×D×H (mm)	已配烘车 (辆) Equipped drying trolley (set)	应配用烘盘 (只) Drying tray to be equipped (pc)		温度自控箱 Temperature automatic control box
1	CT-C-0	RXH-7-C	7.1	1.3	60	10	10	6	3450	0.45	1380×1200×2000	1	24	有 Available	820
2	CT-C-I	RXH-14-C	14.1	2.6	120	18	20	15	3450	0.45	2260×1200×2000	2	48	有 Available	1580
3	CT-C-II	RXH-27-C	28.3	4.9	240	36	40	30	6900	0.45×2	2260×2200×2000	4	96	有 Available	1800
4	CT-C-IIA	RXH-27-C	28.3	4.9	240	36	40	30	6900	0.45×2	4280×1200×2270	4	96	有 Available	1880
5	CT-C-III	RXH-41-C	42.4	7.4	360	60	80	45	10350	0.45×3	2260×3200×2000	6	144	有 Available	2100
6	CT-C-IIIA	RXH-41-C	42.4	7.4	360	60	80	45	10350	0.45×3	3240×2200×2000	6	144	有 Available	2210
7	CT-C-IV	RXH-54-C	56.5	10.3	480	80	100	60	13800	0.45×4	4280×2200×2270	8	192	有 Available	2800
8	CT-I	RXH-14-B	14.1	2.6	120	20	23	15	3450	1.1	2480×1200×2375	2	48	无 None	1220
9	CT-II	RXH-27-B	28.3	4.9	240	40	48	30	5230	1.5	2480×2200×2438	4	96	无 None	1530
10	CT-III	RXH-41-B	42.4	7.4	360	60	72	45	9800	2.2	3430×2200×2620	6	144	无 None	2110
11	CT-IV	RXH-54-B	56.5	10.3	480	80	96	60	11800	3	4460×2200×2620	8	192	无 None	2300

箱体外壁材质有：A₃钢、不锈钢；内壁材质有：铝合金、不锈钢；烘车材质有：A₃钢、不锈钢；烘盘材质有：铝、不锈钢、镀锌板。
Outer wall materials of the oven include A₃ steel, stainless steel; inner wall materials: aluminum alloy, stainless steel; drying trolley materials: A₃ steel, stainless steel; drying tray materials: aluminum stainless steel, galvanized sheet.
备注：所有设备都在不断改进之中。选购设备以最新资料为准。

主要技术参数及有关说明

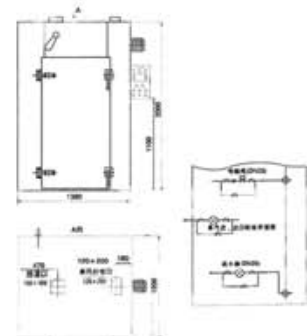
- | | |
|--|--|
| <p>一、热源有：蒸汽、导热油、热水、电加热管、远红外管等，供用户选择。</p> <p>二、使用温度：蒸汽加热室温140℃，最高150℃。</p> <p>三、用电、远红外温度室温350℃。</p> <p>四、备有自控系统和电脑控制系统供用户选择。</p> <p>五、常用蒸汽压力0.2~0.8MPa。</p> | <p>六、配用电加热按1型计算15kw，实用5~8kw/h。</p> <p>七、特殊要求在订货时注明。</p> <p>八、非标烘箱按生产工艺参数进行特别设计制造。</p> <p>九、使用温度大于140℃或小于60℃，要在订货时注明。</p> <p>十、本厂出厂烘车，烘盘尺寸统一，可以互换。</p> <p>十一、烘盘尺寸：460×640×45mm。</p> |
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Main Technical Parameters and Relevant Explanation

- The hot sources can be steam, heat conducting oil, hot water electricity, far infrared, or steam plus electricity. Customers can select one of the heat ways in accordance with practical conditions.
- Temperature of operation: temperature 140℃ for steam, Maximum temperature will be 150℃.
- Temperature-350℃ for electricity or far infrared.
- There are automatic and computer control systems for customers selection.
- The normal pressure of steam will be 0.2-0.8MPa(2-8kg).
- The equipped power of electric heater will be 15kw calculated with Model 1 and the practicality power to be used will be 5-8kw/h.
- If have special requirement, please indicate it in order.
- The price of non-standard oven shall be discussed additionally.
- If the operation temperature is more than 140℃ or less than 60℃, please indicate it in order.
- The size of drying trolley and tray is standardized. They can be exchanged each other.
- The size of drying tray: 460×640×45mm.

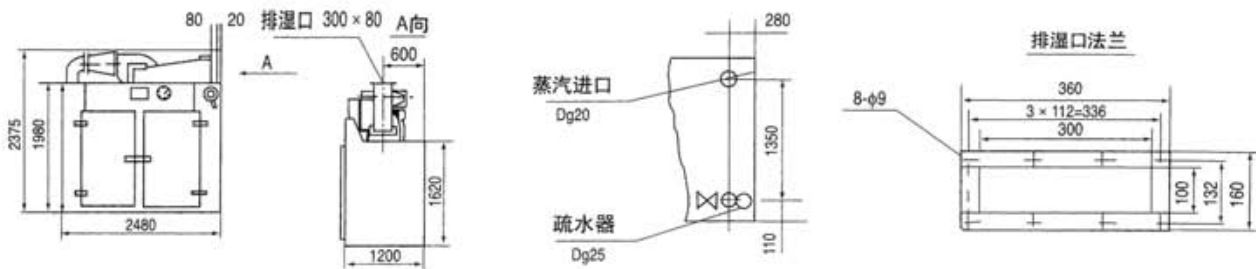
CT-C-O型烘箱示意图

Sketch of model CT-C-O oven

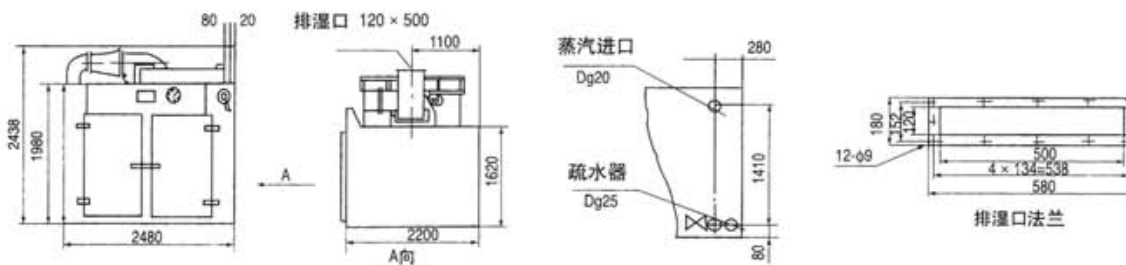


CT、CT-C型热风循环烘箱 CT、CT-C Model Hot Air Circle Oven

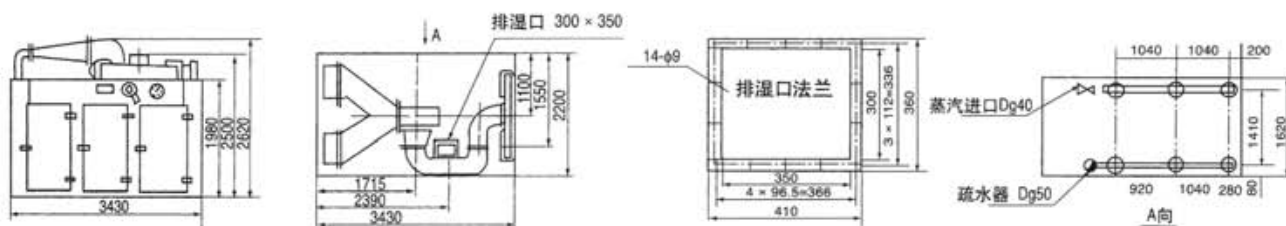
CT-I型烘箱示意图 Sketch of model CT-I oven



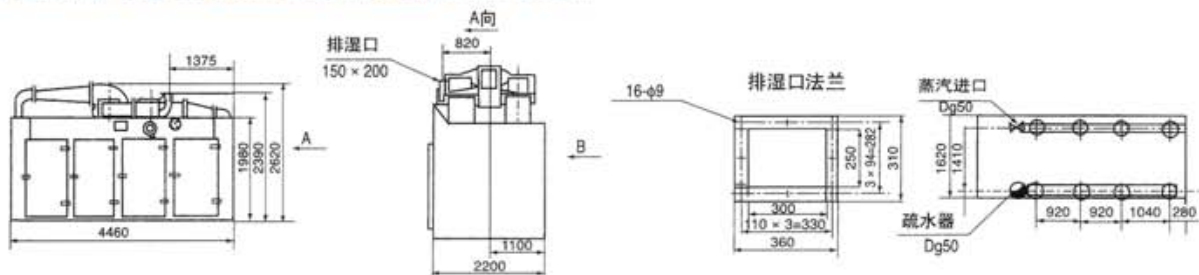
CT-II型烘箱示意图 Sketch of model CT-II oven




CT-III型烘箱示意图 Sketch of model CT-III oven



CT-IV型烘箱示意图 Sketch of model CT-IV oven



烘箱配件 Fittings of oven

 手工井字盘 Handy "井" shape tray	 一次成型压制盘 Molding press tray	 散热器 Radiator	 轴流风机 Axial fan	 定型烘车 材质: 不锈钢, A ₃ 钢 Finalized baking trolley, material: stainless steel, A ₃ steel
 手工井字网盘 Handy "井" shape net tray	 一次成型冲孔盘 定型压制烘盘材质: 不锈钢, 防锈铝合金 Material of baking tray: stainless steel, aluminum alloy			



YZG(圆)、FZG(方)型真空干燥机 YZG(round)、FZG(square) Model Vacuum Dryer



工作原理及特点

纯水在沸腾状态时具有最大的汽化速度。常压下，约100℃时纯水开始沸腾。而在真空条件下，由于系统中水蒸汽分压，远低于物料表面的水蒸汽分压，水的沸点低于100℃。例如：表面降至-0.07MPa时，水在70℃即开始沸腾。一般规律，真空度越高水的沸点越低。在真空干燥器内，汽化后的水能随真空产生系统迅速排除，所以尽管在较低的操作温度下，本干燥器仍有较大的干燥能力。

设备运行时，物料处于静止状态，有利于保持物料的初始形态，间歇操作，能随时调整工艺条件，本设备均为人工装卸料。

FZG方型系列干燥器，顶部布置为拱型结构，能有效克服凝结水返滴问题，进一步提高了干燥效率，并独家设计采用了四点合一抽真空结构，保证了各部位物料干燥的均匀性。

本设备既可用于低温干燥，又能用于溶剂回收，所用热源可为蒸汽，也可为热水，导热油。

特别适用于干燥过程中怕氧化的物料。

Working principle and features

Pure water has the highest evaporation speed under boiling condition. At normal pressure, pure water starts to boil at the temperature of 100℃, under vacuum condition, as vapor pressure in the system is lower than that of material surface, boiling point of water is under 100℃, e.g. when surface is at 0.07MPa, water will boil at the temperature of 70℃, the higher of vacuum pressure, the lower of boiling point. In the vacuum dryer, evaporated water can be removed quickly by the vacuum system, therefore, this dryer has larger drying capability although it's under lower operation temperature.

Material is under static conditions during operation of the equipment, which is benefit for keeping initial status of material, intermittent operation can adjust process conditions at any time.

On the top of FZG-15 dryer, heating system is arranged to tackle the problem of return of condensed water, in addition, air suction is arranged at the side to improve drying efficiency.

This equipment can be used for low temperature drying and solvent recovery, heat sources can be steam, hot water or heat conducting oil.

It is specially suitable for materials that is easily oxygenated during drying.

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 one, the shape and volume of raw materials can not be damaged.

应用范围 Scope of application

适用于医药、化工、食品、电子、中药等行业的热敏性物料干燥。

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

特点

能在较低温度下得到较高的干燥速率，热量利用充分。

适合低温干燥或热敏性物料的干燥。

能干燥含有溶剂及需回收溶剂的物料。

在干燥前可进行消毒处理，干燥过程中无任何不纯物混入。

本干燥器属于静态真空干燥器，故干燥物料的形体不会损坏。



YZG(圆)、FZG(方)型真空干燥机 YZG(round)、FZG(square) Model Vacuum Dryer

订货须知

本厂价格表中的真空干燥器价格仅指真空干燥器本身，不连附件。

订货时请根据干燥物料的物性，初含水率、温度、真空度、干燥量、干燥时间等因素选择合适的真空干燥器，同一种型号的真空干燥器中分别有蒸汽型、热水型、导热油型三种形式的加热方式。例如：为了增加干燥量，可适当增加烘架层数，请及时向我厂提出。

在使用说明书上涉及的真空干燥系统中的附件，我厂均可为用户提供和安装，请在订货时说明。

本厂可对用户提出的真空干燥系统中的特殊要求提供设计、制造与安装。

本厂设备对用户实行质量三保，长期提供一切配件，敬请用户放心。

Notes to order

The price in the table is only the price of vacuum dryer itself not including accessories.

When order, please choose suitable vacuum dryer in accordance with the characteristics of raw materials to be dried such as, physical properties, primary moisture, temperature, vacuum degree, amount to be dried, drying time, etc. The vacuum dryer with same models three types i.e., steam type, hot water type, heat conduction oil type. For example, in order to increase dry quantity, the quantity of layer of baking frame can be increased. Please put forward it to our factory.

The accessories used for vacuum drying system mentioned in Operation Instruments can be provided and installed by our factory. Please explain it when order.

The factory can also provide design, manufacture and installation for special requirements of vacuum drier from customers.

The equipment of our factory carries out "guarantee of repair, replacement and refund of substandard product" and supplies all fittings for a long time. Please put your mind at rest.



技术参数 Technical Parameters

名称 name	规格 model	YZG-600	YZG-800	YZG-1000	YZG-1400	FZG-10	FZG-15	FZG-20
干燥内尺寸	inner size of drying chamber,mm WxHxD	ø600x97	ø800x1247	ø1000x1527	ø1400x2054	1500x1060x1220	1500x1400x1200	1500x1400x1850
干燥外尺寸	outer size of drying chamber,mm WxHxD	1135x810x1020	1700x1045x1335	1693x1190x1500	2386x1675x1920	1924x1720x1513	1924x2063x1513	1924x2063x2153
烘架层数	layers of baking support	4	4	6	8	5	8	8
层间距离	interval,mm	81	82	102	102	122	122	122
烘盘尺寸	size of baking tray,mm	310x600x45	520x410x45	520x410x45	460x640x45	460x640x45	460x640x45	460x640x45
烘盘数	quantity of baking tray	4	8	12	32	20	32	48
烘架管内使用压力	working pressure inside the pipe of baking support,MPa	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4	≤0.4
烘架使用温度	operation temperature of baking support, C	35~150	35~150	35~150	35~150	35~150	35~150	35~150
箱内空载真空度	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
在-0.1MPa,加热温度110C时,水的汽化率	under the condition of -0.1 MPa and 110 C, evaporation rate of water, kg/m ³ ·hr	7.2	7.2	7.2	7.2	7.2	7.2	7.2
用冷凝器时,真空泵型号、功率	When condensor is used, Model, and power of vacuum pump,kw	2x-15A	2x-30A	2x-15A	2x-70A	2x-70A	2x-70A	2x-90A
		2kw	3kw	3kw	5.5kw	5.5kw	5.5kw	7.5kw
不用冷凝器时,真空泵型号、功率	When condensor is not used, Model, and power of vacuum pump,kw	SK-0.5	SK-1	SK-1	SK-2	SK-2	SK-2	SK-3
		1.5KW	2.2KW	2.2KW	5.5KW	4KW	5.5KW	7.5KW
干燥箱重量	Weight of drying chamber,kg	250	600	800	1400	1400	2100	3200

以上参数会随会随实际情况有所变化，仅供参考，不作为最终依据。注：WxHxD（宽x高x深）

SZG型双锥形回转式真空干燥机

SZG Double Conical Revolving Vacuum Dryer



工作原理 Principle of working

SZG双锥回转真空干燥机为双锥形的回转罐体，罐内在真空状态下，向夹套内通入导热油或热水进行加热，热量通过罐体内壁与湿物料接触。湿物料吸热后蒸发的水汽，通过真空泵经真空排气管被抽走。由于罐体内处于真空状态，且罐体的回转使物料不断的上下，内外翻动，故加快了物料的干燥速度，提高干燥效率，达到均匀干燥的目的。

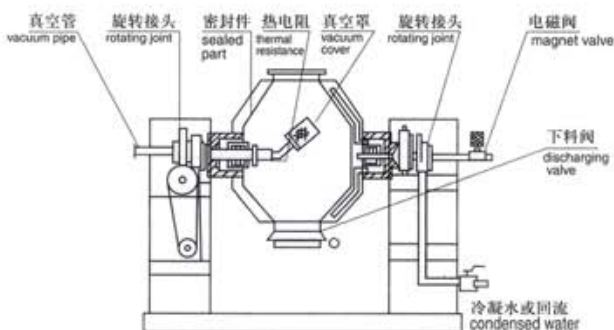
SZG Double Conical revolving Vacuum Dryer is double conical rotating cylinder. Under the state of vacuum in the cylinder, pass oil or hot water into the jacket to heat. The heat will be contacted with damp raw material through inner wall. The evaporated steam after the raw material absorbed heat will 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 raised and the purpose of uniform dry can be reached.

特点 Features

双锥回转真空干燥机是集混合-干燥于一体的新型干燥机。将冷凝器，真空泵与干燥机配套，组成真空干燥装置。（如不需回收溶剂，冷凝器可不用）本机设计先进，内部结构简单，清扫容易，物料能全部排出，操作简便。能降低劳动强度，改善工作环境。同时因容器本身回转时物料亦转动，但器壁上不积料，故传热系数较高，干燥速率大，不仅节约能源，而且物料干燥均匀充分，质量好。可广泛应用于制药、化工、食品、染料等行业的干燥。符合药品管理规范“GMP”的要求。

The Double Conical Revolving Vacuum Dryer is a new style dryer integrated mixing and drying in one body. It is equipped with condensator and vacuum pump. (If the solvent does not recover, the condensator 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 labor strength and improve working environment. Level meanwhile when the cylinder is rotating, the raw material is rotated too, the wall of cylinder can not be accumulated on the wall. 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. It is in conformity with the requirements of "GMP".

简易结构图 Sketch of structure



应用范围 Scope of application

本机适用于医药、食品、化工等行业的粉、粒状物料的真空干燥和混合，尤其适用有下列要求的物料：

- 1、不能接受高温的热敏性物料
- 2、容易氧化，有危险的物料
- 3、需回收溶剂和有毒气体的物料
- 4、对结晶形状有要求的物料
- 5、要求残留挥发物含量极低的物料

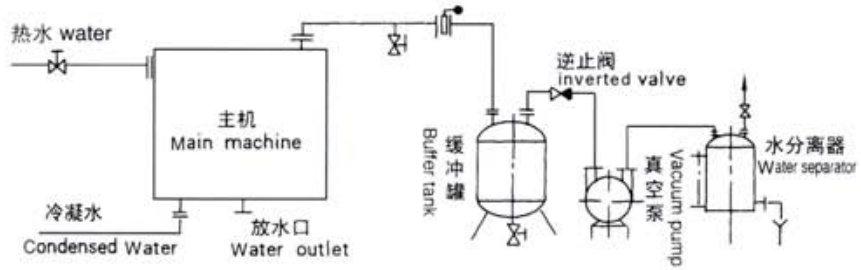
The machine is suitable for vacuum mixing and drying of powder and granule raw materials of pharmaceutical industry, chemical industry, foodstuff industry etc. Particularly it is suitable for raw materials that have the follow requirements:

- Thermal sensitive raw materials that cannot be dried at high temperature.
- Raw materials that is easy to oxidize and have dangerous.
- Raw materials that the solvent and toxic gases are needed to recover.
- Raw materials that have special requirement for crystal shape.
- Raw materials that have special requirement for the content of residual volatile.

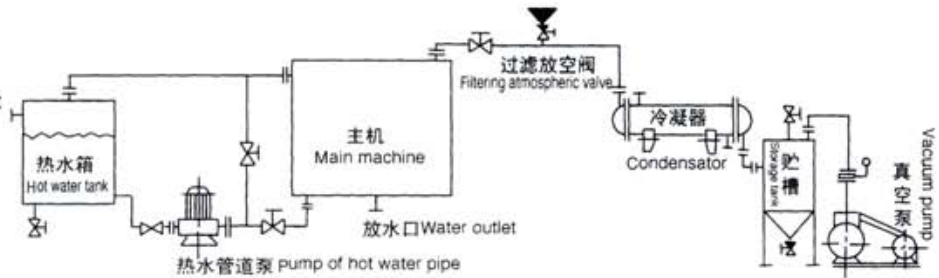


SZG型双锥形回转式真空干燥机 SZG Double Conical Revolving Vacuum Dryer

热水加热，溶剂不回收工艺布置图
Layout adopted hot water to heat and not recover solvent



热水加热，溶剂回收工艺布置图
Layout adopted hot water to heat and recover solvent



技术参数 Technical Parameters

名称Name	型号Model	100	350	500	750	1000	1500	2000	3500	4500	5000
罐内容积 Volume inside the tank(L)		100	350	500	750	1000	1500	2000	3500	4500	5000
最大装料容积 Max.loading capacity(L)		50	175	250	375	500	750	1000	1750	2250	2000
最大装料重量 Max.loading weight(kg)		40	120	200	300	400	600	800	1000	1350	1800
加热面积 heating area		1.16	1.5	2	2.63	3.5	4.61	5.58	7.5	9.6	13.8
转速 Revolution(rpm)		3~13					6	5	4	4	4
电机功率Power of motor(kw)		0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15
占地面积长×宽 Occupied area. L×W(mm)		2160×800	2160×800	2350×800	2560×1000	2860×1300	3060×1300	3260×1400	3760×1800	3960×2000	4400×2500
回转高度Rotating height(mm)		1750	2100	2250	2490	2800	2940	2990	3490	4100	4200
罐内设计压力Design pressure inside the tank(MPa)		-0.1~0.15									
夹套设计压力Design pressure of jacket(MPa)		≤0.3									
冷凝器换热面积 (M ²)		1	2	3	6	6	10	15	25	30	30
重量Weight(kg)		800	1100	1200	1500	2800	3300	3600	6400	7500	8600

注：对干燥前后容积变化很大的物料，其装料系数可适当加大或缩小，最大装料体积不能接触到真空管底面。机组需在我方人员现场指导下进行调试工作

Notes: For raw material, if its volume has great change before and after dry, then its filling coefficient may be increased or decreased suitably.

电机可根据用户要求选配调速电机，转速为0~6rpm；以上技术参数物料比重按0.6g/cm³计算，如超过，定货时需提出；用户如需压力容器证书，定货时需提出；如内胆材料采用搪玻璃，定货时需提出；物料如为易燃易爆性，定货时需明确提出，否则严禁使用。

Speed adjusting motor of 0-6rpm might be chosen according to the user's requirements. The following aspects should be pointed out when order:

1. The above-mentioned parameters are calculated based on material density of 0.6g/cm³. If it's over, please point out.
2. If certificate for pressure vessel is required, please point out.
3. If glass lining for interior surface is required, please point out.

If the material is explosive, or flammable, the calculation should be made according to trial result.

订货须知

加热分热水，黄色导热油加热二种方式。

订货时请注明物料所能承受的温度或干燥机的使用温度，以便本厂为您选择或提供热源。

干燥粘性物料时，本厂将在罐内特别设计“抄板”结构。真空干燥系统中涉及的附件，我厂均可为用户提供和安装，请在订货中说明。

本厂可对用户提出的特殊要求提供设计、制造和安装。

整体设备配套按需要加价。

Notice in order

Its heating has three ways i.e. steam, hot water, heat conduction oil.

When order, please indicate the temperature of raw material to be undertaken or the operation temperature of drier in order to choose or provide suitable heat source for you.

When dry viscous raw material, our factory will design special stirring device in the chamber.

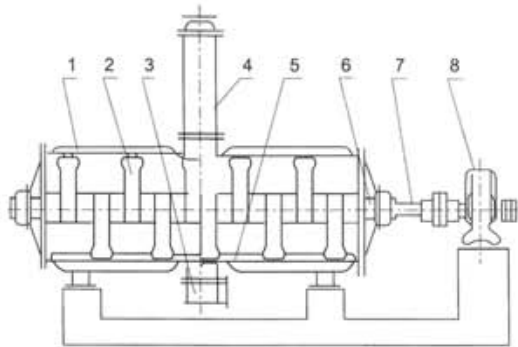
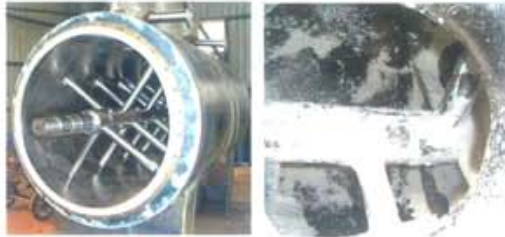
The auxiliary parts of vacuum drying system can be supplied and installed by our factory. Please indicate them when order.

If having special requirements, our factory can also design, manufacture and install as request.

The cost of complete equipment should be increased in accordance with the needs.

ZB型真空耙式干燥机

ZB Model Vacuum Harrow Dryer



- 1. 壳体 Shell
- 2. 耙齿 Harrow
- 3. 出料装置 Discharging device
- 4. 加料装置 Feeding device
- 5. 粉碎棒 Grinding rod
- 6. 密封装置 Airproof device
- 7. 搅拌轴 Stirring shaft
- 8. 传动装置 Driving device

技术参数 Technical Parameters

项 目 Item		型 号 spec						
名 称 Name	单 位 unit	ZB-500	ZB-750	ZB-1000	ZB-1500	ZB-2000	ZB-3000	ZB-5000
工作容积 Working volume	L	300	450	600	900	1200	1800	3000
内筒尺寸 Size in the cylinder	mm	ø600x1500	ø800x1500	ø800x2000	ø1000x2000	ø1000x2600	ø1200x2600	ø1400x3400
搅拌转速 Stirring speed	rpm	5~25		5~12		5		
功 率 Power	kw	4	5.5	5.5	7.5	11	18.5	22
夹层设计压力 Design pressure of jacket	MPa	≤ 0.3						
筒内压力 Pressure in the cylinder	MPa	-0.09~-0.096						

注：水份蒸发量与物料的特性及干燥温度有关。随着产品不断更新，有关参数变更，恕不预先通知。

Note: The evaporated amount of water its related to the characteristics of raw materials and the drying temperature. With renew products unceasingly, the related parameter will be exchanged, it does not announce in advance, pardon!

特 点 Features

本机采用大面积夹层加热方式，传热面大，热效率高。
本机设置搅拌，使物料在筒内形成连续循环状态，进一步提高了物料受热的均匀度。

本机设置搅拌，从而可顺利进行浆状、膏状、糊状物料干燥。

Being adapted the big area heating way, its heat conducting area large and its heat efficiency is high.

Being installed stirring in the machine, it makes raw material in cylinder form the state of continuous circle inside the cylinder, so the uniformity to be heated of raw material is raised geatly.

Being installed stirring in the machine, pulpiness, pasteraw materials can be dried easily.

原 理 Principle

本机是一种新颖卧式间歇式真空干燥设备，湿物料经传导蒸发，带有刮板搅拌器不断清除热面上的物料，并在容器内推移形成循环流，水份蒸发后由真空泵抽出。

It is an innovation horizontal batch-type vacuum dryer. The moisture of wet material will be evaporated by heat transmsion. The stirrer with squeegee will remove material on hot surface and move in the container to form cycle flow. The evaporated moisture will be pumped out by vacuum pump.

应 用 Applications

适用于浆状、膏糊状、粉状物料。

要求低温干燥的热敏性物；

易氧化、易爆、强刺激、剧毒物料。

要求回收有机溶剂的物料。

The following raw materials from pharmaceutical industry, foodstuff industry, chemical industry and so on can be dried;

Suitable for pulpiness, paste-like mixture or powder raw materials.

Thermal sensitive raw materials having the requirement to dry at lower temperature.

Raw materials that are easy to oxidize or explode and have strong irritative or toxic.

Raw materials that need to recover solvent.



工作原理 Principle of working



本机组是一种可以同时完成干燥和造粒的装置。按工艺要求得到所需的按一定大小比例的颗粒。本机组工作过程为从真空转鼓出来的物料和其他原料混合经过管道送入高速混合机器内混合，混合出来的物料进料高速挤压造粒机内，挤压出长条形规则的粒子，出料的粒子经过振动给料机进料一级立式圆形转鼓沸腾干燥床，从一级出料的物料由螺旋输送机出料，采用风送进入二级卧式沸腾床干燥出合格成品。尾粉和废气一起进料布袋除尘器或者旋风分离器进行固气分离，废气有排风风机排空。

本机组的热源装置采用蒸汽加热，具有操作方便、启动快、结构紧凑、热风干净清洁等优点。

This machine can finish drying and granulating at the same time. certain size granules can be got according to the process requirements. its process as follows. material from vacuum rotary drum together with other raw materials fed into high-speed mixing machine through ducts, mixing. Mixed material entry into high-speed screw granulator. Regular oblong granules got. Next, granules fed into first level vertical round rotary drum fluidizing drying bed by vibrating feeder. and discharged by screw feeder. and then come to second level horizontal fluid bed. Fine powder and wast air separated by bag filter or cyclone, wast air exhaust from suction fan. The heat resource of this machine is steam, convenient to operate, quick start, compact structure, clean hot air and so on.

特点 Features

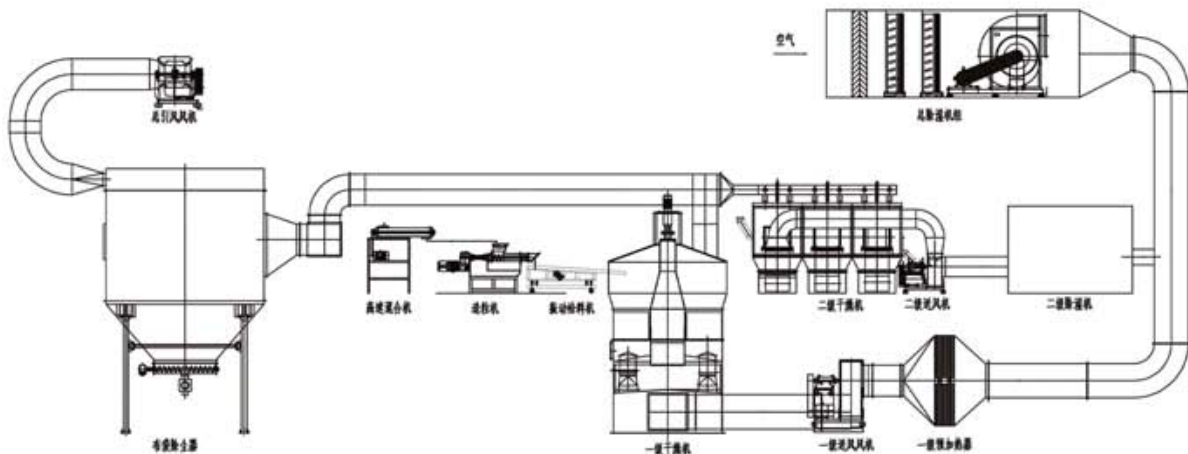
- 1、干燥速度快，物料经过沸腾后表面积大大增加，在热风气流中，可蒸发60%的水份，特别适用于热敏性物料的干燥。
- 2、所得产品为柱状颗粒，粒度均匀、流动性好、溶解性好，产品纯度高。
- 3、使用范围广，根据物料的特性，低温热风干燥，对物料的适应性强。
- 4、操作简单稳定，控制方便，容易实现自动化作业。

1. Fast drying, surface area of the material after fluidizing is greatly increased, in hot-air current, 60% water can be evaporated, special suitable for drying of thermal sensitive material.
2. The finished granules are cylinder-shaped, even granule, good flow-ability and solubility, high purity and good quality.
3. Widely application, according to material features, low-temperature drying do great helpful for material adaptability.
4. Simple operation, convenient control, easy to realize robotization work.

应用范围 Scope of application

本机组适用于：食品酵母、面包酵母、药用酵母、饲料酵母等。

This machine is suitable for: food yeast, bread yeast, pharmaceutic yeast, feeding-stuff yeast and so on.



说明：从真空吸鼓机出来的物料和其它原料混合经过管道送入高速混合机器内混合，混合出来的物料进入造粒机内，制造出长条粒子，出来的长粒子经过振动筛断断粒子进入一级干燥机组干燥，干燥出来的物料从出料口用螺旋输送机输送出料，用风送吸料系统吸入二级干燥床干燥，从二级干燥床出来的物料为成品，风送进入存储罐体。少料细粉由总引风机经过布袋除尘器回收废料。

FG型沸腾干燥机 (立式)

FG Model fluidized dryer(vertical type)

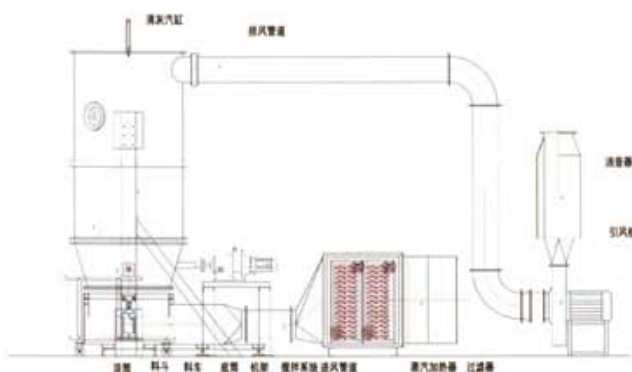


应用 Applications

本机主要用于医药、食品、化工等行业进行粉末或颗粒物料的干燥。
The machine is mainly used for drying powder or granule from pharmaceutical, foodstuff and chemical industries and so on.

特点 Features

1. 流态化干燥，热质传递快；
 2. 在封闭负压下操作，无粉尘飞扬；
 3. 采用抗静电过滤材料，操作安全；
 4. 设备无死角，清洗彻底，无交叉污染,根据特殊需求，可以增加搅拌机物，负压上料系统。
 5. 与GFG相比，有更大的流化空间。
1. Fluidized drying, Heat transfer express.
 2. Operation in hermetic closure and negative pressure, there is no dust nuisance
 3. Uses antistatic filter material, processing is safe;
 4. There is no blind angle, easy to clean, no cross contamination. According to special requires, can add mixer, feeder with negative pressure system.
 5. Compares to GFG Type, this unit has bigger fluidizing space.



技术参数 Technical Parameters

项目Item		单位Unit	机 型Type							
			3	5	30	60	120	200	300	500
原料容器 Container of raw material	直径Dim	mm	300	400	700	1000	1200	1400	1600	1800
	容积Volume	L	12	22	100	220	420	670	1000	1500
生产能力 Production capacity	最小Min	kg/batch	1.5	4	15	30	80	100	150	250
	最大Max	kg/batch	4	6	36	72	140	240	360	600
蒸汽耗量Consume of steam		kg/batch	12	23	70	140	211	282	366	465
压缩空气量Amount of compressed air		m³/min	0.3	0.3	0.3	0.6	0.6	0.9	1.1	1.6
风机功率Power of fan		kw	2.2	2.2	5.5	11	18.5	22	30	45
温度Temperature		°C	常温~120°C 自动调节 (Adjustable from ambient to 120°C)							
物料收率Yield		%	>99							
终湿含量Content at final moisture		%	~0.2							
噪音Noise		dB(A)	<75							
主机高度Height of main machine		mm	2100	2300	2500	3000	3300	3800	4000	4400

应用范围 Scope of application

- 主要用于含有溶剂、溶媒的物料的干燥和溶媒的回收
- 摇摆颗粒、湿法高速混合制粒含有溶剂的颗粒物料干燥
- 医药、食品、化工等领域含有溶剂的湿颗粒和粉状颗粒的干燥
- 大颗粒或小块状以及较小粘性的物料的干燥
- Mainly used for solvent recover and drying of material with solvent.
- For drying of material with solvent from Sway Granulator and high-speed mixing granulator.
- For drying of wet granules and powder granules with solvent in food stuff, chemical industry, pharmaceutical industry and so on.
- For drying of large granules, small blocks and Low-viscosity material.



工作原理 Principle of working

以氮气为传导传热介质，实现对制药、生化、化工、生物等技术领域含有机溶媒、溶剂物料的干燥生产与溶媒、溶剂的回收，具备安全生产、高效、低耗节能减排的实用性。

干燥机内的气体在风机（引风、送风兼用）的循环下，经换热器加热，由高效过滤器过滤后进入沸腾式加热、干燥物料，热风穿过物料的同时由内搅拌机构的不断搅拌下使物料与热空气充分接触换热。待物料内的溶媒（酒精、丙酮、甲醇等）蒸发出来，在循环气体的带动下，夹带于气体中的细粉物料，经氮气反吹除尘器，实现对夹带于气体中的粉尘物料进行捕集，余热气体经由过滤器过滤后进入冷凝器，经冷凝器冷却介质，冷凝至露点和气体分离，实现对有机溶媒的回收。分离后的气体再由风机送入加热器，这样周而复始的循环工作。直至将所有的溶媒从物料中蒸发、分离、冷凝出来。

干燥后物料经过冷却后从底部再排放出来，盛放物料的网板是由气缸控制的可活动翻板。

物料排放完毕后，可用风机对干燥室内的过滤器进行清扫过滤。

Take nitrogen as medium for heat transfer, to realize solvent recovery and drying of material with solvent, with features of safety, high efficiency, Low energy consumption and so on.

Air under the circulation function of fan(both blower fan and suction fan),after heated by steam radiator and filtrated by HEPA filter, entry into fluid bed dryer to dry the material. At the meantime, under the continuous stirring of stirring system inside the dryer, hot air and raw Material exchange their heat fully. After solvent (alcohol, acetone, methanol and so on)steamed out, fine powder together with circulating gas come out, fine powder caught by nitrogen blowback system. Waste-heat air after filtrated by filter entry into compensator, solvent is cooled to dew point and separated from air, so solvent recycled. Separated air is fed into air heater by fan, go round and begin again like this..Until all solvent is steamed out, separate and recovered.

After drying, products are discharged from the bottom of the dryer, net plate for material is flexible reverse turning bed and controlled by cylinder.

After all products discharged, fan can clean the air filter inside the dryer.

设备的特点及优势 features and advantage

1、高效

设备为全封闭结构，无死角，出风、进风均采用高温高效过滤，整个系统采用三级除尘，除尘效率更高，且易拆装、清洗。在物料干燥完成后，使用反吹技术，除尘更彻底，减少清洗频率，操作简单，有效降低劳动强度并可避免产品受污染的情况，符合 GMP 要求。

设备能够长期稳定的连续运行，自动化程度高。既可干燥、冷却溶媒，又可冷却物料，干燥效率比回转、耙式的高，可提高 4~5 倍的干燥速度，同时干燥后的产品品质稳定，为用户创造更大的产品价值。

根据客户需要，可配备真空上料、出料，提高一体化智能操作。

2、安全

基于有机溶剂具备易燃易爆的安全危险性，本机组系统内同时采用在线测氧、超压泄放和防爆、泄爆等安全技术手段，通过智能化控制技术，实现对系统内氧气残留量的监测，气压平衡监测和自动调节控制。当系统内的空气（氧气）含量超过 0.5%（v/v）时，测氧装置即会通过控制系统指令氮气补充阀打开，向系统内补充新鲜氮气，使系统内的氧气残留量恢复到安全设定值的范围内

设备的特点及优势 features and advantage

(闭路循环系统设计为正压,氧气的进入则是通过加料过程进入循环系统)。当系统内的气压值超过设定值时(循环系统气压平衡值设定为 0.02mPa),泄压装置则会通过智能控制中心指令,自动打开泄压气动阀,排除超压气体,而防爆泄爆装置,则是本机组采用的另一项安全技术措施,即系统内电气或关键部位发生故障,系统正常工作失灵,气压升高至安全极限值(系统设计耐压值小于等于 0.05Mpa),防爆泄爆装置即会自动打开定向泄爆并自动切断电源,关闭进出管道阀门,保证溶媒没有与氧气反应的可能性,有效的避免设备在生产过程中发生火灾或爆炸事故,最大限度的规避人员伤亡和财产损失,确保生产安全。

3、节能

设备是全封闭式系统,热介质经过网板向上吹起物料,与物料的接触更充分,使传热和传质过程得以强化,在较小的风量下能够达到较高的气体含湿量,因此工作时只需要微正压,风量较小,设备的风机功率降低,噪音变小,同时干燥之后含有溶媒的热湿气,经过冷凝器分离后,回收的溶媒可以再次利用,同时,低露点的氮气经循环风机后进入加热器重新加热循环利用,与常规烘干设备相比,热效率提高了,动力消耗明显下降,因此节约了设备的能源损耗及生产成本。

4、环保

本机组实现对含有溶媒物料在干燥生产工艺过程中的回收利用,在解决相关行业在干燥难与废气排放污染重的基础上,实现溶剂回收利用,同时做到零排放,避免了尾气对环境的污染,获得节能减排的实用性效果。

1. High efficiency.

This machine is fully enclosed structure, no dead corner, both air exhaust system and air in system takes high-temperature and high-efficiency filter. The whole system has 3 levels of dust catcher, with high-efficiency dust catcher, easy to discharge and clean. After drying finished, because of blowback system, dust elimination is more thoroughgoing, reducing cleaning frequency, which can reduce labor intensity and avoid pollution of different products, Low viscosity, meeting GMP standards.

This machine can work continuously and steady in a long term, high degree of automation. It not only can dry, cool solvent, but also can cool raw material, drying efficiency is higher than other dryer, 4 to 5 times drying speed. And, the finished products have good quantity, which can create bigger product value for the user.

According to the user's requirement, vacuum feeder, vacuum discharger for optional, to enhance automatization degree.

2. Safety.

Because of flammable and combustible dangerous of organic solvent, this machine take Safety technologys including on-line Oxygen checking, explosion-proof, Explosion venting and so on. Through intelligentized control technology, to monitor Oxygen residues/Pressure balance in the system and automatic modulation control. When air(oxygen) content exceed 0.5% (v/v),oxygen checking device open the Replenishing valve to supply fresh nitrogen by control system, to recovery the oxygen residues to a safety value(closed-circuit system is designed into positive pressure,oxygen entry into circulation system by material feeding).When air pressure inside the system exceed setted value(air pressure balance is setted into 0.02mpa),explosion venting device will automatically open decompression Pneumatic valve to exhaust some air by intelligentized control .The explosion-proof and explosion venting system is another safety technology of this machine, that is when certain electrical equipment or key device damaged, the system is out of normal working and air pressure up to safety ultimate value(\leq 0.05Mpa),explosion-proof and explosion venting system will be automatically opened, power cutted off and pipe valve closed, there is no probability of solvent reacting with oxygen,which avoid fire damagesor explosion during machine working.to make sure safety production.

3. Saving energy.

This machine is full closed system. Hot air through net board blow up the material. Hot air contact with material fully. The process of heat transfer is enhanced. At a Few air condition, a high air moisture can be got, so Only Micro positive pressure during working, needed air quantity is small. Fan power of this machine is smaller and less noise. At the meantime,

Hot air with solvent after drying is separated by condensator. The recovered solvent can be reused. So saving energy and production cost. Also, Low dew point nitrogen is sent to air heater for cyclic utilization by fan. Compared with common dryer, thermal efficiency enhanced, power consumption reduced, so heat consumption and production cost saved.

4. Environmental protection.

This machine recovery the solvent from raw material during drying process based on solving the problem hard drying and Heavy pollution. At the meantime, zero exhaust avoid environmental pollution because of waste gas.



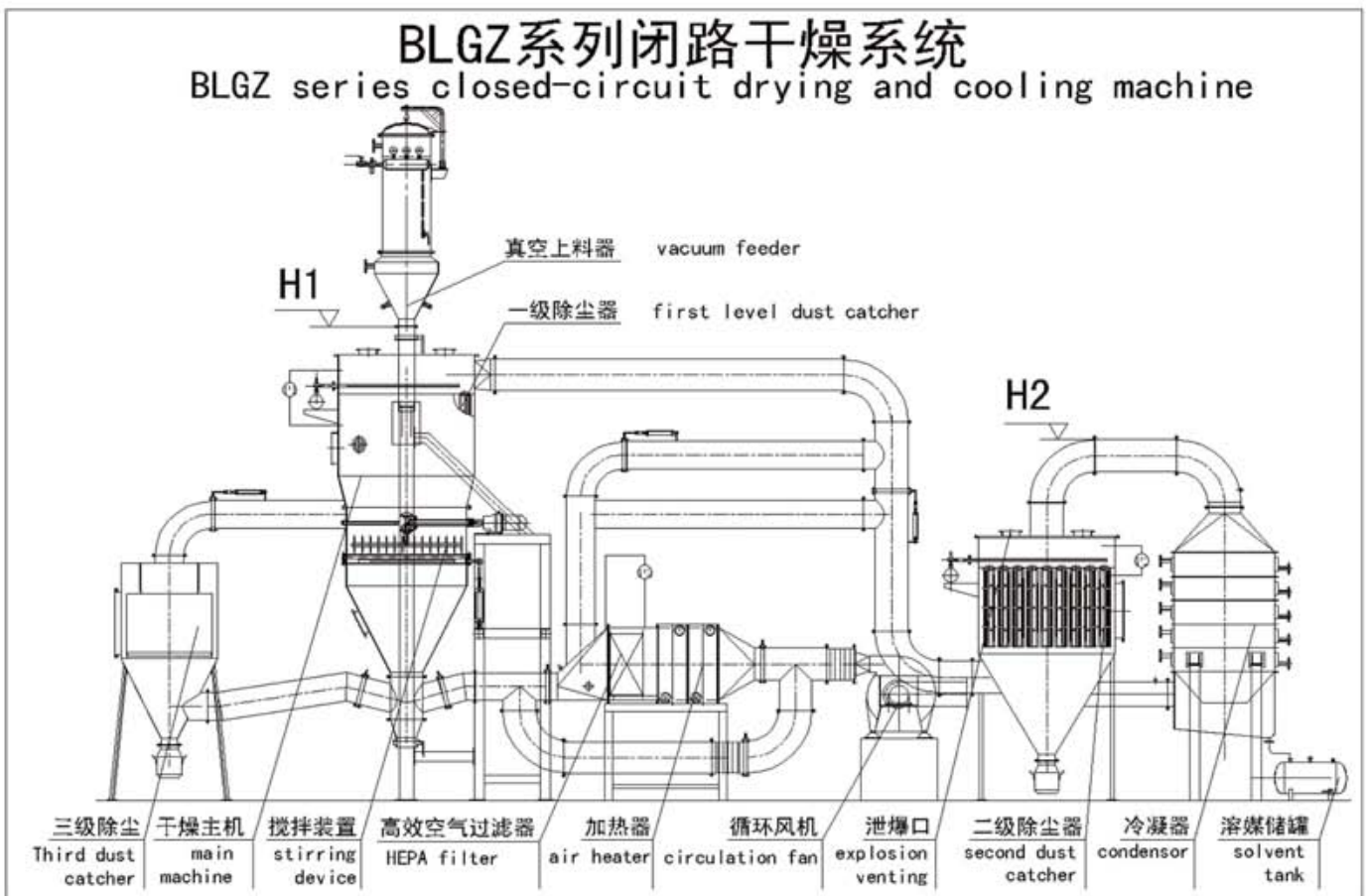
BLGZ型系列闭路式干燥、冷却机
BLGZ series closed type drying and cooling machine

技术参数 Technical parameters

型号 Model			60	120	150	200	300	400	500
项目 Item	单位 Unit								
原料容器 Container of raw material	直径 Dia. Mm		Φ900	Φ1000	Φ1100	Φ1400	Φ1600	Φ1800	Φ2000
生产能力 Production capacity	最小 Min kg/batch		40	70	90	120	150	255	355
	最大 Max kg/batch		65	135	170	250	355	480	580
蒸汽耗量 Steam consumption	kg/batch		130	210	240	280	360	500	600
氮气量 Nitrogen consumption	m ³ /min		0.6	0.6	0.9	0.9	1.1	1.6	2.0
风机功率 Power of fan	kw		11	18.5	22	30	37	45	55
溶媒回收率 Solvent recovery percentage	%		≥95						
温度 Temperature	℃		常温~140℃ 根据物料特性调节(room temperature to 140℃,Adjustable according to material features)						
物料收率 Product ratio	%		>99						
终含湿量 Final moisture	%		~0.2						
噪音 Noise	db(A)		≤75						
外形尺寸(长x宽) Overall dimensions(LxW)	mm		6852X3740	7266X3803	7340X3910	7550X4330	8420X4620	9870X5520	10600X5600
高度 Height	H1 mm		4800	5500	5750	5750	6540	6540	6600
	H2 mm		4000	4100	4200	4420	4620	4700	5050

说明：以上参数仅供参考，干燥强度与物料特性、使用温度等因素有关。

Notes:Parameters above for reference only.Drying capacity depends on material features,drying temperature and some other factors.



应用范围 Scope of application

机制螺杆挤压颗粒、摇摆颗粒、湿法高速混合制粒颗粒。
医药、食品、饲料、化工等领域湿颗粒和粉状物料干燥。
大颗粒、小块状、粘性块粒状物料。
魔芋、聚丙烯酰胺等干燥时体积变化的物料。

Use screw to extrude and vibrate granule and granulate granule with the method of humidity, high speed and mixing;
Suitable for drying humidity block or powder raw material in the fields such as pharmaceutical, foodstuff, feed stuff, chemical industries and so on;
The raw material that large in granule and small in block and having adhesive property;
Suitable for raw materials, its volume will be changed when dry, such as giantarum, polyacrylamide, etc.

工作原理 Principle of working

空气经加热净化后，由引风机从下部导入，穿过料斗的孔网板。
在工作室内，经搅拌和负压作用形成流态化，水份快速蒸发后随着排气带走，物料快速干燥。

When air is purified and heated, it is introduced from the bottom of induced-draft fan and passed through the screen plate of raw material. In working chamber, the state of fluidization is formed through stirring and negative effect. The moisture is evaporated and removed rapidly and the raw material is dried quickly.

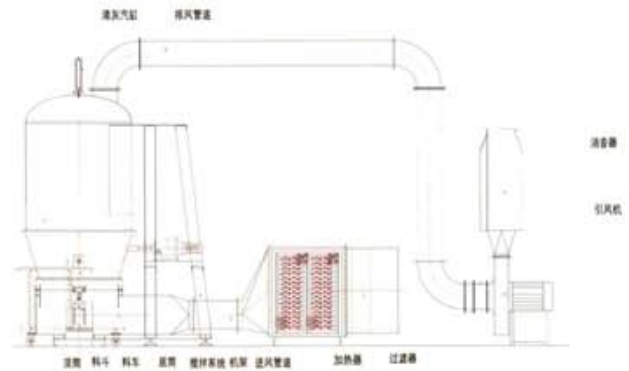


特点 Features

流化床为圆形结构，避免死角。
料斗设置搅拌，避免潮湿物料团聚及干燥时形成沟流。
采用翻倾卸料，方便迅速彻底，亦可按要求设计自动进出料系统。
密闭负压操作，气体经过过滤。操作简便，清洗方便，是符合“GMP”要求的理想设备。
干燥速度快，温度均匀，每批干燥时间一般在15-45分钟。

The structure of fluidization 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 cleanliness. 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 each batch.

安装示意图 Schematic of installation



技术参数 Technical Parameters

项 目 Item	单 位 Unit	型 号 Type							
		60	100	120	150	200	300	500	
生产能力 Production capacity	kg/batch	30-60	60-100	80-120	100-150	120-200	200-300	300-500	
原料容器 Container of raw material	直径 Dia	mm	1000	1000	1200	1300	1300	1600	1800
	容积的 1/3 Volume	L	220	330	420	500	670	1000	1500
风 机 Fan	风量 Air volume	m ³ /h	2361	3488	4000	4901	6032	7800	10800
	风压 Air pressure	mmH ₂ O	594	533	533	679	787	950	950
	功率 Power	kw	7.5	11	15	18.5	22	30	45
搅拌功率 Stirring power	kw	0.55	0.55	0.75	0.75	0.75	1.1	1.5	
搅拌转速 Stirring speed	r.p.m	11							
蒸汽耗量 Consumption of steam	kg/h	141	170	210	240	282	366	451	
操作时间 Time of operation	min	15-45 (视物料情况而定) (According to raw material)							
主机高度 Height of main machine	方形 Square	mm	2750	2850	2850	2900	3100	3300	3650
	圆形 Round	mm	2700	2900	2900	2900	3100	3600	3850

XF型箱式沸腾干燥机

XF Model Box-shaped Fluidizing Dryer

粉状、颗粒物料快速干燥设备

Rapid powder-& granule-shaped material drying equipment



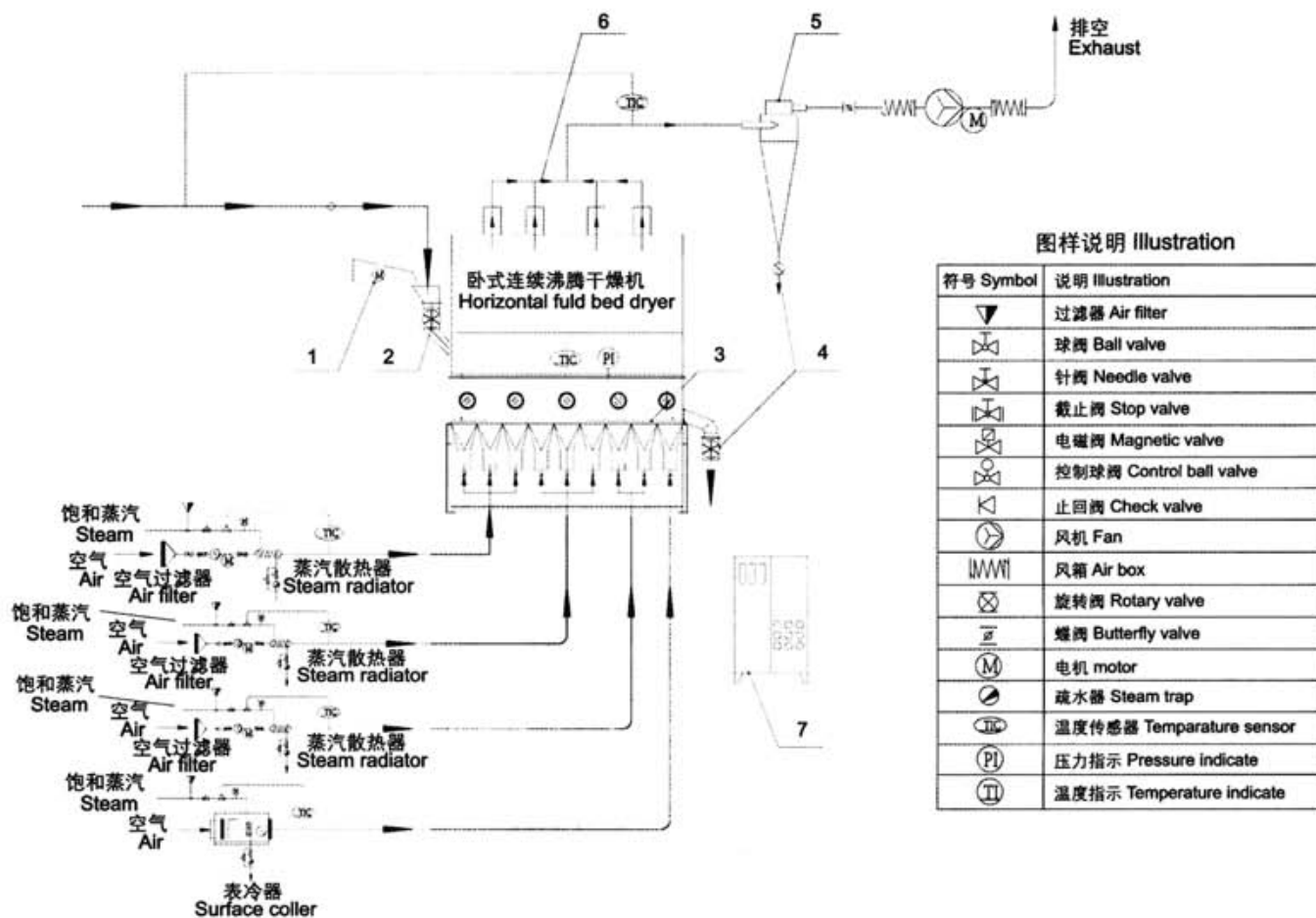
加热方式 Heating method

蒸汽或电加热，也可用燃油（或燃煤）的热风炉直接得到热风。
Steam ,electric power or fuel(or coal) can be used.

应用范围 Application scope

沸腾干燥器，又称流化床，自应用30多年来，有了不断的改进、提高，在制药、化工、食品、粮食加工等行业广泛应用。如：原料药、颗粒成药、冲剂、饲料、塑料树脂等粉状、颗粒状物料的除湿、干燥。物料粒径可以在0.1~6mm范围，最佳为0.5~3mm。

Fluidizing dryer is also called fluidization bed. Through continuously improvement over 30 years, it has widely applied in the fields of pharmaceutical, chemicals, foodstuff, processing grain etc. For example, the dehumidification and drying of and granular materials such as bulk Pharmaceuticals, granular patent medicines, preparations, feed, plastic resin etc. The granular diameter shall be within the range from 0.1 to 6mm and the best is 0.5 to 3mm.



图样说明 Illustration

符号 Symbol	说明 Illustration
▽	过滤器 Air filter
⊘	球阀 Ball valve
⌵	针阀 Needle valve
⊘	截止阀 Stop valve
⊘	电磁阀 Magnetic valve
⊘	控制球阀 Control ball valve
⊘	止回阀 Check valve
⊘	风机 Fan
⊘	风箱 Air box
⊘	旋转阀 Rotary valve
⊘	蝶阀 Butterfly valve
⊘	电机 motor
⊘	疏水器 Steam trap
⊘	温度传感器 Temperature sensor
⊘	压力指示 Pressure indicate
⊘	温度指示 Temperature indicate

1. 振动给料器 Vibrating feeder	2. 星型给料阀 Star shape feeding valve	3. 沸腾床 Fluid bed
4. 出料阀 Discharge valve	5. 旋风分离器 Cyclone separator	6. 排风总管 Exhaust pipe
7. 控制柜 Control cabinet		

工作原理 working Principle

洁净的热风经阀板分配进入床体内，从加料器进入的湿物料被热风形成流化状态，如煮沸的开水在床体内跳跃，故称为沸腾干燥器（或机），由于热风与物料广泛接触，因此在较短时间内就可干燥。从床体的一头进入，经过几分钟至几十分钟时间的“沸腾”，自动从床体的另一头流出。

Working principle is that the clean & hot air enters into fluidization bed through distributor of valve plate. The wet material fed from feeder will be formed a fluidization state by hot air (jumping within the bed like boiling water), so it is called fluidizing dryer or machine. Because of the wide contact between hot air and materials, their drying time is shorter. The air enters from one end of bed, through "boiling" several minutes, and then comes out automatically from the other end. The dryer is also applicable for thermal sensitive material as a result of very short drying time and lower temperature of material proper.

主要技术参数 Main Technical Parameters

	XF0.25-1 (原XF10)	XF0.25-2 (原XF20)	XF0.25-3 (原XF30)	XF0.25-6	XF0.3-2	XF0.3-4	XF0.3-6	XF0.3-8	XF0.3-10	XF0.4-4	XF0.4-6
床层面积 Area of bed layer(m ²)	0.25	0.5	1.0	1.5	0.6	1.2	1.8	2.1	3.0	1.6	2.4
干燥能力 Drying capacity(kg.H ₂ O/h)	10-15	20-25	30-45	52-75	-30	42-60	63-90	84-120	105-150	56-80	84-120
风机功率 Power of fan(Kw)	5.5	7.5	15	22	7.5	15	22	30	30	22	37
进风温度 Temperature of air in(°C)	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140
物料温度 Temperature of Raw material(°C)	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60
外形尺寸(主机)长×宽×高 Overall dimensions(main machine)L×W×H(m)	1×0.6 ×3.35	2×0.6 ×3.35	4×0.6 ×3.35	6×0.6 ×3.35	2×0.70 ×3.4	4×0.7 ×3.4	6×0.7 ×3.4	8×0.7 ×3.4	10×0.7 ×3.4	4×1× ×3.58	6×1× ×3.58
占地面积 Occupied area(m ²)	18	25	35	40	25	38	45	56	70	18	56

	XF0.4-8	XF0.4-10	XF0.4-12	XF0.5-4 (原XF50)	XF0.5-6	XF0.5-8	XF0.5-10	XF0.5-12	XF0.5-14	XF0.5-16	XF0.5-18
床层面积 Area of bed layer(m ²)	3.2	4.0	4.8	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
干燥能力 Drying capacity(kg.H ₂ O/h)	112-160	140-200	168-240	70-100	105-150	140-200	175-250	210-300	245-350	280-400	315-450
风机功率 Power of fan(Kw)	44	60	74	30	44	60	90	111	148	169	197
进风温度 Temperature of air in(°C)	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140	120-140
物料温度 Raw material(°C)	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60
外形尺寸(主机)长×宽×高 Overall dimensions(main machine)L×W×H(m)	8×1 ×3.58	10×1 ×3.58	12×1 ×3.58	4×1.2 ×4.1	6×1.2 ×4.1	8×1.2 ×4.1	10×1.2 ×4.1	12×1.2 ×4.1	12×1.2 ×4.1	16×1.2 ×4.1	18×1.2 ×4.1
占地面积 Occupied area(m ²)	74	82	96	50	70	82	100	140	180	225	268

“干燥能力”：以干燥酸梅晶，初含水份20%、终含水份5%、进风温度130℃而测定，其它物料干燥能力将根据不同情况而定。

“加热能耗”：蒸汽或电可单独使用。

The drying ability is measured on the basis of the primary and final moisture contents of 20% and 5% respectively of drying plum crystal and air in take temperature at 130℃. The drying ability of other materials will be based on the practical drying condition.

“Heating energy consumption” :Steam or electric power may be used independently.

安装说明 Installation explanation

沸腾床、旋风分离器及布袋除尘器安放在平整的水泥地上即可，不需底脚螺丝。风机可安装在室内或室外，需有底座及地脚螺丝。平面布置可根据厂房情况酌情调整。

风道系统应不漏气，以免影响干燥效果。

Fluidizing bed, cyclone separator and cloth bag dust remover should be placed on the flat concrete ground, and no foundation screws needed. The fan with underframe and foundation screws may be installed indoors or outdoors. The plan can be adjusted slightly in accordance with the practical conditions.

No air should leak in air pipe system to be free from the influence on drying efficiency.

ZLG型振动流化床

ZLG Model Line Vibration Fluidizing Bed Dryer



工作原理 Principle of Work

物料自进料口进入机内，在振动力作用下，物料沿水平方向抛掷向前连续运动，热风向上穿过流化床和湿物料换热，湿空气经旋风分离器除尘后由排风口排出，干燥物料由排料口排出。

Raw material is fed into the machine from the inlet 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 duster, and the dry raw material is discharged through discharge outlet.

应用范围 Scope of Application

1. 医药化工：各种压片颗粒，硼酸、硼砂、苯二酚、苹果酸、马来酸。
2. 食品建材：酒糟、味精、砂糖、食盐、矿渣、豆瓣、种籽。
3. 还可用于物料的冷却、增湿。

1. Pharmaceutical and chemical industries: all kinds of press tablet and granule, boric acid, borax, dihydroxybenzene, malic acid, maleic acid and so on;
2. Foodstuff and construction material industries: lees, monosodium glutamate, edible sugar, edible salt, mine residue, bean, seeds and so on;
3. It also can be used for raw materials to add up damp or cooling and so on.

特点 Features

1. 物料受热均匀，热交换充分，干燥强度高，比普通干燥机节能30%左右。
2. 振动源采用振动电机驱动，运转平稳、维修方便、噪音低、寿命长。
3. 流态化稳定，无死角和吹穿现象。
4. 可调性好，适应面宽。
5. 对物料表面损伤小，可用于易碎物料的干燥，物料颗粒不规则时亦不影响工作效果。
6. 采用全封闭式的结构，有效地防止了物料与空气间的交叉污染，作业环境清洁。

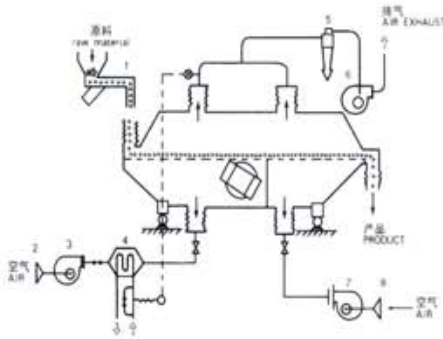


1. Raw material is heated evenly and heat exchange is fully used and dry capacity is high. Compared with ordinary drier, the energy can be saved about 30%.
2. The vibration is created by motor. It is stable in operation and convenient in maintenance, low noise and long life;
3. The fluidized state is stable and no dead angle and phenomenon of broken out;
4. It is good in regulation and wide in suitability.
5. It is small for damaging 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;
6. 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.

ZLG型振动流化床 ZLG Model Line Vibration Fluidizing Bed Dryer

振动流化床配套系统图

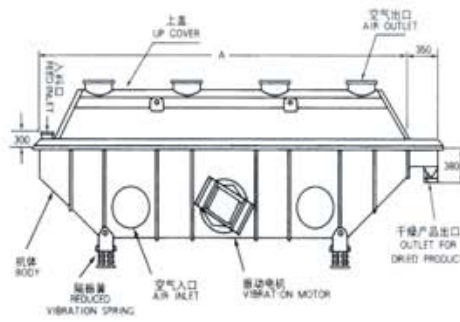
Complete System Chart of Vibration Fluidized Bed



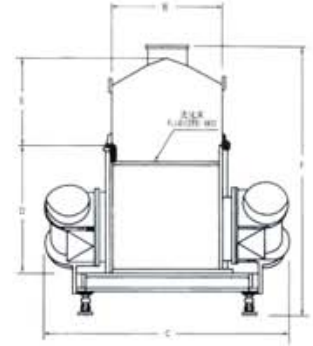
- 1. 振动给料机 Vibration feeder
- 5. 旋风除尘器 Cyclone

振动流化床干燥机简图

Sketch Chart of Vibration Fluidized Bed



- 2. 过滤器 Filter
- 3. 给风机 Draught Fan
- 4. 换热器 Heat exchanger
- 6. 排风机 Air exhaust fan
- 7. 冷却风机 Cooling Fan
- 8. 过滤器 Filter



技术参数 Technical Parameters

型号 Model (ZLG)	A	B	C	D	E	F	重量 Weight(kg)
3 × 0.30	3000	300	1350	900	430	1650	1250
4.5 × 0.30	4500	300	1350	900	430	1650	1560
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

型号 Model (ZLG)	流化床面积 Area of Fluidized-bed(m ²)	进风温度 Temperature of inlet air(°C)	出风温度 Temperature of outlet air(°C)	蒸发水份能力 Capacity to vaporize moisture(kg/h)	振动电机 Vibration Motor	
					型号 Model	功率 Power(kw)
3 × 0.30	0.9	70~140	40~70	20~35	ZDS31-6	0.8 × 2
4.5 × 0.30	1.35	70~140	40~70	35~50	ZDS31-6	0.8 × 2
4.5 × 0.45	2.025	70~140	40~70	50~70	ZDS32-6	1.1 × 2
4.5 × 0.60	2.7	70~140	40~70	70~90	ZDS32-6	1.1 × 2
6 × 0.45	2.7	70~140	40~70	80~100	ZDS41-6	1.5 × 2
6 × 0.60	3.6	70~140	40~70	100~130	ZDS41-6	1.5 × 2
6 × 0.75	4.5	70~140	40~70	120~140	ZDS42-6	2.2 × 2
6 × 0.9	5.4	70~140	40~70	140~170	ZDS42-6	2.2 × 2
7.5 × 0.6	4.5	70~140	40~70	130~150	ZDS42-6	2.2 × 2
7.5 × 0.75	5.625	70~140	40~70	150~180	ZDS51-6	3.0 × 2
7.5 × 0.9	6.75	70~140	40~70	160~210	ZDS51-6	3.0 × 2
7.5 × 1.2	9	70~140	40~70	200~260	ZDS51-6	3.0 × 2

DW系列带式干燥机

DW Model Belt Dryer

满足工艺要求是设备的首要任务，我们可以提供符合各种工艺要求的非标设备。



概述

将所要处理的物料通过适当的加料机构，如星型布料器、摆动带、粉碎机或造粒机，分布在输送带上，输送带通过一个或几个加热单元组成的通道，每个加热单元均配有空气加热和循环系统，每一个通道有一个或几个排湿系统，在输送带通过时，热空气从上往下或从下往上通过输送带上的物料，从而使物料能均匀干燥。

用途

带式干燥机是常用的连续式干燥设备，可广泛应用于化工、食品、医药、建材、电子等行业，特别适合于透气较好的片状、条状、颗粒状物料的干燥，对滤饼类和膏状物料，也可通过造粒机或挤条机制成型后进行干燥。

典型产品

脱水蔬菜、颗粒饲料、味精、鸡精、椰蓉、有机颜料、合成橡胶、丙烯纤维、药品、药材、小木制品、塑料制品、电子元器件老化、固化等。



It is the final target for equipment to meet the requirements of technology. We can provide all kinds of nonstandard equipments that can meet the requirements of technology.



Descriptions

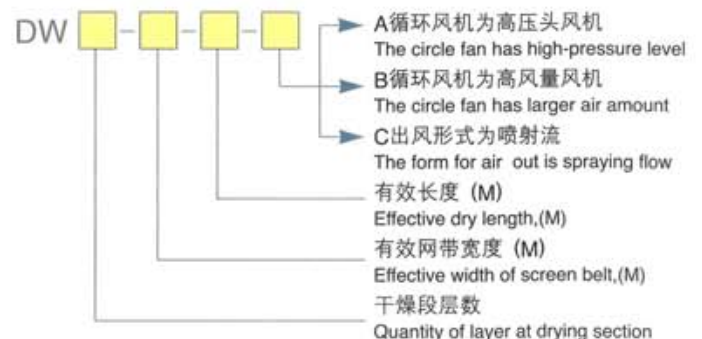
The raw materials to be treated should distribute on the conveyer belt through suitable mechanism such as star distributor, swing belt, crusher or granulator, The conveyer passes through the channel including of one or several heating unit. Each heating unit is equipped with air heater and circle system.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

Application

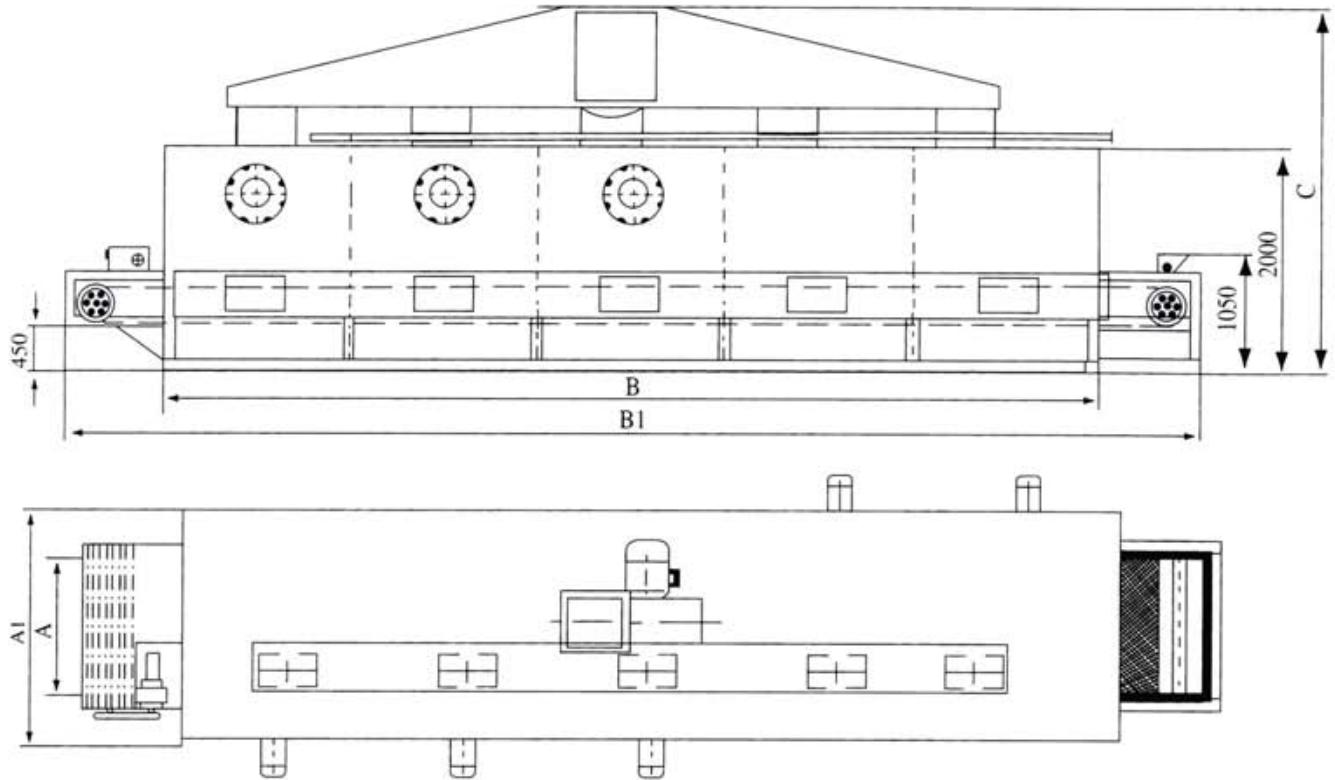
The belt dryer is an ordinary continuous drying equipment. It is widely used for chemical industry, foodstuff industry, pharmaceutical industry, construction materials industry, electronics industry and so on. Especially it is suitable for drying raw materials that are good in breathability and have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

Typical products

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



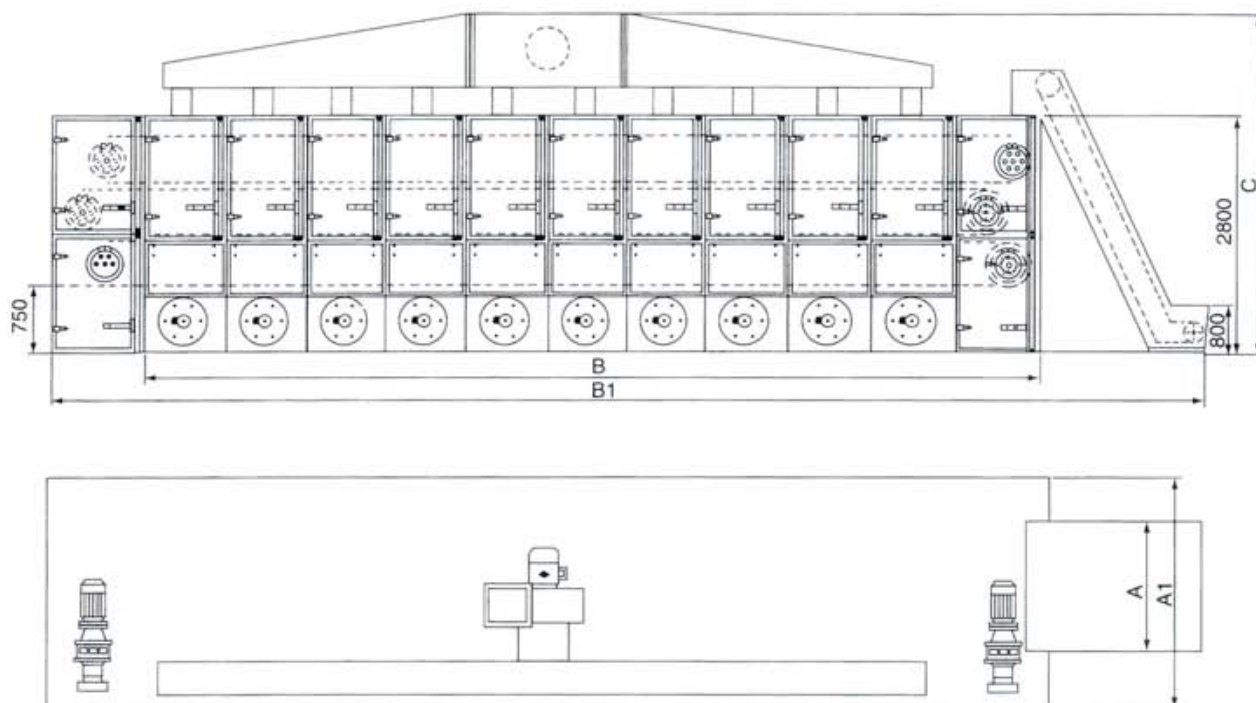
DW-B系列带式干燥机
DW-B Model belt dryer



技术参数 Technical Parameters:

型号 Model	DW-1.2-8B	DW-1.2-10B	DW-1.6-8B	DW-1.6-10B	DW-2.0-8B	DW-2.0-10B	
单元数 Quantity of unit	4	5	4	5	4	5	
干燥段长 Length of drying section(M)	8	10	8	10	8	10	
铺料厚度 Thickness of raw material layer (mm)	≤60						
使用温度 Operation temperature (°C)	50-140						
蒸汽压力 Steam pressure (Mpa)	0.2-0.8						
蒸汽耗量 Steam consume (Kg/h)	120-300	150-375	150-375	170-470	180-500	225-600	
干燥时间 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	
干燥强度 Drying strength (Kg · H ₂ O/m ² ·h)	6-30						
装机功率 Power equipped (kw)	13.6	15.8	13.6	15.8	14.7	16.9	
外形尺寸 overall dimensions(m)	A	1.2	1.2	1.6	1.6	2.0	2.0
	A1	1.95	1.95	2.35	2.35	2.75	2.75
	B	8.0	10.0	8.0	10.0	10.0	10.0
	B1	9.5	11.5	9.5	11.5	9.5	11.5
	C	2.5	2.5	2.5	2.5	2.6	2.6

说明：以上参数仅供参考。干燥强度与物料特性、使用温度等因素有关。
Explanation: the parameters above mentioned is for reference only. The dry strength is concerned with many factors such as properties of raw material, operation temperature.



技术参数 Technical Parameters:

型号 Model	DW3-1.2-8B	DW3-1.2-10B	DW3-1.6-8B	DW3-1.6-10B	DW3-2.0-8B	DW3-2.0-10B
单元数 Quantity of unit	8	10	8	10	8	10
干燥段长 Length of drying section(M)	24	30	24	30	24	30
铺料厚度 Thickness of raw material layer (mm)	≤60					
使用温度 Operation temperature (°C)	50-140					
蒸汽压力 Steam pressure (Mpa)	0.2-0.8					
蒸汽耗量 Steam consume (Kg/h)	240-550	300-750	300-750	340-950	350-1000	400-1200
干燥时间 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
干燥强度 Drying strength (Kg · H ₂ O/m ² ·h)	6-30					
装机功率 Power equipped (kw)	21.7	26.1	21.7	27.2	29.2	35.2
外形尺寸 overall dimensions(m)	A	1.2	1.2	1.6	1.6	2.0
	A1	2.1	2.1	2.8	2.8	3.2
	B	8.0	10.0	8.0	10.0	8.0
	B1	12.5	14.5	12.5	14.5	12.5
	C	3.5	3.5	3.5	3.5	3.6

说明：以上参数仅供参考，干燥强度与物料特性、使用温度等因素有关。

Explanation: The parameters above mentioned is for reference only. The dry strength is concerned with many factors such as properties of raw material, operation temperature.

备注：所有设备都在不断改进之中，选购设备以最新资料为准。

XSG型旋转闪蒸干燥机 XSG Model Revolving Flash Vaporization Dryer

概述 Descriptions

旋转闪蒸干燥机是我公司为克服静态干燥低效、高耗而研制开发的新型高效流态化干燥设备。该机在设计过程中充分结合气流干燥等普通流态干燥的特点，扬长避短，使整机具有合理的工艺结构和优越的使用性能，真正实现流态化干燥的低耗、高效目标。

本机应用范围极其广泛，可用于橡塑助剂、农药、颜料、染料、精细化工、饲料、医药及部分中间体的脱湿干燥。



The revolving flash vaporization dryer is a new and high-efficiency fluidized drying equipment which is researched and developed for the sake of overcoming the low-efficiency and high-consumed static drying by our company. We have joined the characteristics of ordinary fluidized drying such as air stream drying, in designing process, and have developed advantage and reduced shortcoming with the advantageous usage function. All this really realizes the target of the consuming and high efficiency of the fluidized drying.

The dryer is widely used for drying rubber and plasticizer, agrochemical, pigment, dyestuff, chemical industry, animal feed, medicine and kinds of intermediates.

原理 Principle

热空气由进风口以适宜的喷动速度从干燥机底部进入搅拌粉碎干燥室，对物料产生强烈的剪切、吹浮、旋转作用，于是物料受到离心、剪切、碰撞、磨擦而被微粒化，强化了传质传热。在干燥机底部，较大较湿的颗粒团在搅拌器的作用下被机械破碎，湿含量较低、颗粒度较小的颗粒被旋转气流夹带上升，在上升的过程中进一步干燥，由于气固相作旋转流动，固相惯性大于气相，固气两相间的相对速度较大，强化两相间的传热效果，所以该机干燥强度高。

Hot air enters into stirring and crushing and drying chamber from the bottom of dryer with suitable atomizing speed. It exerts strong shearing, blowing, floating and rotating effect to raw material. Therefore raw material is granulated through centrifugating, shearing, impacting and friction effect. It strengthens the process of heat exchange. At the bottom of dryer, the large and damp granule is crushed under the action of stirrer and the granule that is small in partical and contain less moisture will lift accompanied with revolving air stream. During the period of lift, it is dried further. Because gas and solid two phases flow in heat exchange, so the machine has strong drying capacity.

特点 Features

- 多种加料装置供选择，加料连续稳定，不会产生架桥现象。
- 干燥机底部设置特殊的冷却装置，避免了物料在底部高温区产生变质现象。
- 特殊的气压密封装置和轴承冷却装置，有效延长传动部分使用寿命。
- 特殊的分风装置，降低了设备阻力，同时使塔内风速趋于平衡。
- 干燥室装有分级环及旋流片，物料细度和终水份可调可控。
- 干燥室内周向气速高，物料停留时间短，有效防止物料粘壁及热敏性物料变质。



There are many kinds of feeding equipment for choosing, and feeding is continue and static.

At the bottom of dryer, where is high temperature area, heat sensitivity raw material can not contact with heat surface directly, therefore it solves the carbonized and changed color problems of heat sensitivity raw material.

There are air pressure equipment and shaft cooling equipment, so can longer life of machine.

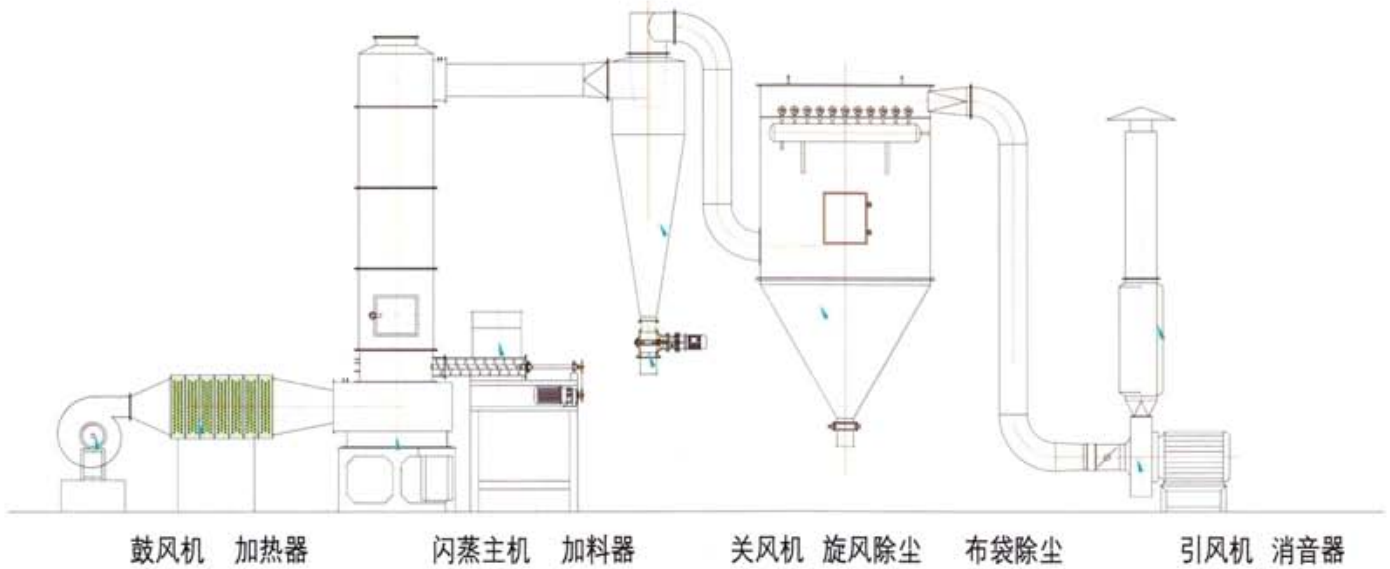
There is special equipment for sharing wind, and raising the amount of hot air.

There are rotational flow pieces inside the drying chamber. It is used to control the moisture and granule of raw material.

Because gas speed at circle inside the drying chamber is high and the staying time of raw material is short, high efficiency and quick speed can be realized.



布置参考图 Sketch of Collocation



注：热源可以选用燃油、燃气、燃煤热风炉

技术参数 Technical Parameters

项目 Item 型号 model	主机内径 (mm) Interior diameter of main machine	处理风量 (m³/h) Air handle volume	蒸发水份 (kg/h) Evaporated capacity	装机容量 (kw) Equipped power	最大高度 (m) Max.high	占地面积 (m²) Occupied area
XSG-4	400	2100	40-70	25	4.6	19
XSG-6	600	4500	80-150	37	5.5	26
XSG-8	800	7500	150-250	48	6.0	34
XSG-10	1000	12000	230-420	75	6.5	45
XSG-12	1200	18000	300-600	85	7	58
XSG-14	1400	24000	500-800	98	7.8	76
XSG-16	1600	30000	600-1000	135	8.5	110

注：1. 水份蒸发量以进风温度200℃，出风温度80℃计。 2. 装机容量为基本数据，可根据物料的理化性能改变。 3. 占地面积根据实际情况布置，表中数据仅供参考。
Notes: 1. The evaporated amount of moisture is calculated when the temperature of inlet is 200℃ and the temperature of outlet is 80℃. 2. Besides the models above mentioned, specification can also be made as request. 3. Occupied area will be different because of different environment.

XSG型旋转闪蒸干燥机

XSG Model Revolzing Flash Vaporization Dryer

干燥实例 Dried samples

类别 Category	物料名称 Name of raw material	初水份 (%) Inial water content	终水份 (%) Final water content		
无 机 盐	硬盐 Harlsalz	硬脂酸钡 Barium stearate	40	0.5	
		硬脂酸锌 Zinc stearate	40	0.5	
		硬脂酸铝 Aluminum stearate	45	2.0	
		硬脂酸钙 Calcium sterarate	40	2.5	
		硬脂酸镁 Magnesium stearate	45	5.0	
	碳酸盐 Carbonate	碳酸锰 Manganese carbonate	20	1.0	
		碳酸铈 Cerium carbonate	31	17 (含结晶水)	
		碳酸锌 Zinc carbonate	80	0.5	
		碳酸钙 Calcium carbonate	30	0.2	
	氧化物 Oxide	氧化锆 Zirconia	80	1.0	
		氧化铁红 Iron oxide red	60	1.0	
		氧化锌 Zinc oxide	60	1.0	
	氯盐 Chlorate	氢氧化铝 Aluminum hydroxide	55	1.0	
		氯化亚铜 Cuprous chloride	45	1.0	
		硫酸盐 Sulfate	二氯异氰尿酸钠 Sodium isocyanurate sioxide	25	1.0
			硫酸钙 Calcium sulfate	35	3.0
			焦亚硫酸钠 Sodim pyrosulfite	20	0.2
	其它 Other	白炭黑 Silica	85	0.5	
三盐基硫酸铅 Lead sulfate		25	0.5		
偏硅酸钠 Sodium metasilicate		47.5	42.4		
有机化工原料 Organic Chemical raw materials	三苯基醋酸锡 Fentin acetate	25	1.0		
	乙酰乙酰苯胺 Acetoacetyl aniline	15	0.2		
	漂粉精 High test bleaching powder	35-40	3		
农药 Agrochemicals	巴丹 Padan	20	1.0		
	杀虫单 Monosultap	20	1.0		
	阿维菌素 ABamectin	80	15		
	扫螨净 Pyridaben	25	0.5		
	多效唑 Paclobutrazol	26	1.0		
	灭多威 Methomyl	15	2.0		
	精噻禾灵 Quizalofop-p-ethyl	58	1.0		
	代森锰锌 Mancozeb	30	1.0		
	三环唑 Tricyclazole	28	1.0		
	阿特拉津 Atrazine	40	1.0		
	染料、颜料 Dyestuff pigment	酞青蓝 Fast blue	35	0.5	
活性黄 Reactive yellow		60	3.0		
硫化红棕 Sulphur bordeaux		60	3.0		
碱性嫩黄 Basic yellow		40	0.3		
油溶黑 Diiblack		45	1.0		
硫化蓝 Sulphur blue		60	3.0		
铅铬黄 Lead chrome yellow		40	0.1		
催化剂 Catalyst	歧化催化剂 Disproportionated catalyst	50	1.0		
	4A分子筛 Molecular sieve type 4A	24	2.0		
	M.DM.CBS橡胶促进剂 Rubber accelerator	20-30	0.3		
医药 Pharmaceutical	鸟苷 Guanosine	40	1.0		
	核苷酸、酵母 Nucleotide,Vita yeast powder	40	6		
	莫能霉素 Mohensin	30	3.0		

概述 Descriptions

气流干燥又称瞬间干燥，我国从六十年代起开始在制药化工行业应用。我厂在建厂伊始就选用国内外最先进技术，为制药、化工、食品行业提供质高价廉的成套设备。多年来，经过不断地改进提高，发展成以下四大系列：

Q系列基本型；QG系列风机兼分散器型；FG系列尾气循环型；JG系列强化型。

Air stream dry is also called as momentary dry. From 1960's it is applied at pharmaceutical industry. At the beginning of foundation, we began to choose the advanced technologies both at home and abroad and provide complete equipment with high quality and low price to pharmaceutical industry, chemical industry, foodstuff industry and so on. For many years it has developed 4 series through unceasing improvement and raising:

Q series:basic type;QG series:fan and distributor type;FG series:tail air circle type;JG series:reinforce type.

特点 Features

1. 干燥强度大、设备投资省：气流干燥设备的处理量是最大的，蒸发水份能力从50kg/h-1500kg/h，而设备容积小，投资省，是其他干燥设备所无法比拟的。

2. 自动化程度高、产品质量好：气流干燥物料全在管道中进行，干燥时间极短（只有0.5-2秒）因此可实现自动化，产品不与外界接触，污染小，质量好。

3. 设备成套供应、热源自由选择：基本型由空气过滤器、加热器、加料器、干燥管、风机、旋风分离器组成。用户可根据需要添置除尘器或其他辅助设备。

在加热方式选择上，气流干燥设备有较大的适应性，用户可以根据所在地区的条件选用蒸汽、电、热风炉加热，同时又可根据物料耐热温度（或热风温度）选择：≤150℃时，可选用蒸汽加热；≤200℃时，电加热（或蒸汽加热，电补偿或导热油加热）；≤300℃时，燃煤热风炉；≤600℃时，燃油热风炉。

1.The dry strength is large and investment of equipment is small:the treating amount of air stream drier is the largest. The evaporated moisture capacity of equipment manufactured by we will be 50-1500kg/hr. The volume of equipment is small and the investment is saving. This advantage can not be compared from other drying equipments.

2.The automatic degree is high and the quality of product is good:the raw material to be dried is inside the pipe. The dry time is short(only 0.5-2 seconds). So that the automatic can be realized. The raw material can not contact with outer substances. So the pollution is small and the quality of product is good.

3.The equipment will be supplied completely and the heat source can be chosen freely:the air stream of drier will be supplied completely. The basic type consists of filter, heater, feeder,drying pipe,fan and cyclone separator.Customer can install duster and other auxiliary equipment in accordance with practical conditions. On the choice of heating way,air stream drier has wide suitability. Customer can choose steam,electricity and air-heated furnace to heat in accordance with practical conditions. Meanwhile it should be chosen in accordance with the temperature of raw material to be resisted(or temperature of hot air):if ≤150℃,choose steam to heat, if ≤200℃,electric or steam and electric as supplement or heat conduct oil;if ≤300℃,coal air-heated furnace;if ≤600℃,oil air-heated furnace.

工作原理 Principle of Work

湿物料经输送机与加热后的自然空气同时进入干燥器，二者充分混和，由于热质交换面积大，从而在很短的时间内达到蒸发干燥的目的。干燥后的成品从旋风分离器排出，一小部分飞粉由旋风除尘器或布袋除尘器得到回收利用。Q型气流干燥器是负压操作，物料不经过风机；QG型气流干燥是正压操作，物料经过风机带有粉碎作用；FG型气流干燥器是尾气循环型；JG型气流干燥是强化型气流干燥器，其集闪蒸干燥与气流干燥为一体，是我厂根据用户要求设计的新型干燥设备。

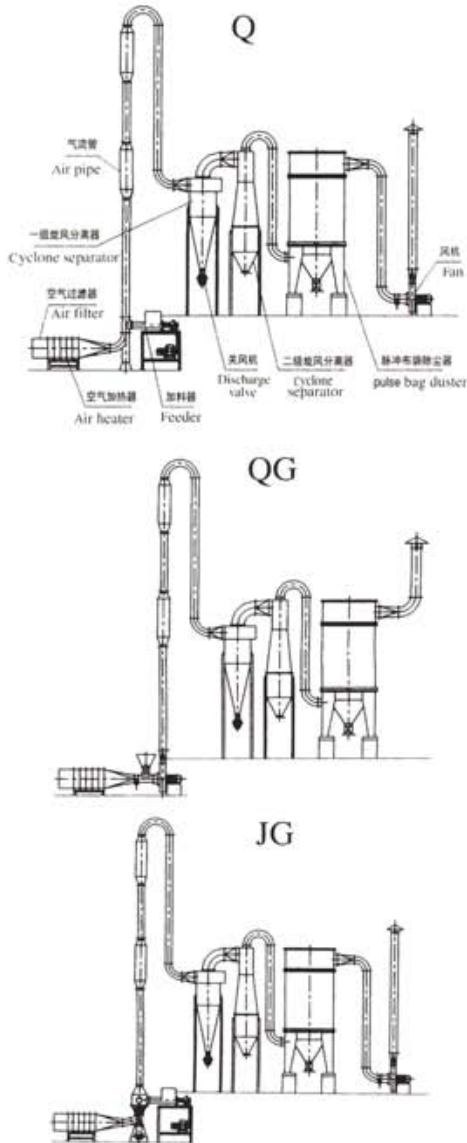
The damp raw material through conveyer and heated fresh air enter into the dryer at the same time. They are mixed fully. Because the area of heat exchange is large, the purpose of evaporation and dry can be realized in a short time. The dried finished product is discharged from cyclone separator. Small parts of powder dust can be recovered and used through cyclone separator or bag duster.Model Q air stream is operated at negative pressure. The raw material does not pass through fan.Model QG air stream dryer is operated at positive pressure.The raw material passes through fan with the effect of crushing.Model FG air steam dryer is tail air circle type. Model JG air stream dryer is a reinforced type. It integrates flash dry and air stream dry in one body and is also a newest style dryer designed and manufactured by us as customer request.

技术咨询及试验 Technical consultation and test

气流干燥是一种批量大、热效率较高的快速连续瞬间干燥设备，虽然其适用于多种物料的干燥，但由于物料性质差异较大，为了使广大用户能够选择到最佳的干燥设备，我厂免费技术咨询，提供安装布置图，进行物料试验。

Air steam dryer is quick,continuous and momentary drying equipment having larger in batch and high in heat efficiency. Even though it can suitable for different raw materials drying, but there exists large difference among raw materials, in order to make customers choose their expected drying equipment, we will provide technical consultation and provide installation and arrangement plan and make test of raw materials free of charge.

QG、JG型气流干燥机
QG And JG Model Air Stream Dryer



技术参数 Technical Parameters

型号 Model	蒸发水份 Evaporated moisture(kgh)	装机功率 Equipped power(kw)	占地 Occupied area(m)	高度 Height(m)
Q50	50	6.25(8.25)	20	9
QG50	50	6.25(8.25)	20	9
JG50	50	9.25(11.25)	20	9
Q100	100	8.6(11.6)	32	11
QG100	100	8.6(11.6)	32	11
JG100	100	16.1(19.1)	32	11
Q250	250	20(27.5)	64	16
QG250	250	20(27.5)	64	16
JG250	250	31(38.5)	64	16
Q500	500	33(48)	96	16
QG500	500	33(48)	96	16
JG500	500	48(58)	96	16
Q1000	1000	63(78)	120	16
QG1000	1000	63(78)	120	16
JG1000	1000	78(98)	120	16

注：装机功率一栏括号中为配布装除尘器时功率。

Note: The data in the bracket at the line of equipped power will be the power of bag duster.

说明：以上参数仅供参考，干燥强度与物料特性、使用温度等因素有关。

Explanation: the parameters above mentioned is for reference only. The dry strength is concerned with many factors such as properties of raw material, operation temperature.

干燥举例

物料名称	进料湿含量	产品湿含量%	风进口温度/°C	废气排出温度/°C	产品粒数/目
阿斯匹林	2.5-5	0.2	80	60	
玫瑰精	35	3-4	180	60	40
草酸	4-5	0.5	120	40	20
醋酸钠	10	2-3	80-90		
味精	4-5	0.1	100		
药用小苏打	3	0.05	110		
焦亚硫酸钠	5-6	0.05	100	40	
葡萄糖	16-17	9.1	90	40	20目
小麦淀粉	40-41	12-14	240-260	50-55	
硼砂	4-5	0.5	70-90	50	
玉米淀粉	40	13	120-130	40	80-100目
NH ₄ HCO ₃	6	0.5以下	70-90	50	
硬脂酸盐类	40-50		105-200	70-80	200
氟硅酸钠	12	1以下	400	160	
苯甲酸	25	0.5	110	60	80
六六六	12-14	5-6	90	40-50	
吡唑酮	15	0.6	90-110	55-60	
磺化煤	60-70	20-40	250(进口)		
硫铵	1.8-2.5	0.02-0.08	100-115	70-90	
磺胺(SN)	20	1	110-120	50	1.5
对氨基粉	10	0.4	240	70	
淀粉	42.9	12.7	147.6	38.2	0.05
活性炭	205	4	455		
熔融磷肥	5	0.3	200		
茶粕	115	6.4	620		
促进剂M.D.M	20	0.5以下	150	50-80	100
扑热息痛	6-7	0.2	135-140	75-80	40-60
锯屑	77	50	220	60	粒状
安乃近	20	4-5	100	70	
聚甲醛	20	1	135	65	120-150
食用小苏打	3.9	0.2	180-240	50-70	0.005-0.01mm
微球催化剂	25	13	500-580	130-150	40-50
717离子交换树脂	4-7	0.1-0.4	120	70-80	1-200
触媒	18-25	5	110-130	60	18-20
次亚硫酸钠	5.8	0.2	150	108	
粉碎碳	13.6	5.3	330	100	

注：以上参数仅供参考

ZLPG型中药浸膏喷雾干燥机组

ZLPG Model Chinese Herbal Medicine Extract Spraying Dryer



概述 Descriptions

中药浸膏是由植物根茎叶提取而成，特别是醇提工艺，它含糖份较高，在高温下易软化熔融，普通的离心喷雾已无法满足干燥，针对这种情况我公司组织了一批精干的技术力量，总结出几年来本厂设计制造喷雾干燥机的成功经验，收集了国内外同行业同类型产品的长处，经过精密反复的工艺计算和无数次的实验试验，研究开发出了中药专用喷雾干燥机组，并推广到一些知名药厂使用。

Chinese herbal medicine extract is refined from root, stem and leaves of plants, and contains high sugar which is easily melted at high temperature. Normal centrifugal spraying cannot meet its drying requirements. For that reason, our company organized a group of technicians to develop such a dryer especially used for Chinese herbal medicine

extract after repeated calculations and countless tests on the basis of our experience to make spraying dryer and collect advantages of same kind of dryers from both domestic and abroad.



设备特点 Features of Equipment

中药专用喷雾干燥机组在设计中作了改进：

1. 塔径塔高作了相应的调整，既保证粉料干燥之前达不到塔壁，又可保证粉料的热风停留时间而完成低温干燥；塔壁设有夹套冷风冷却装置，确保料液不会粘结在塔壁上因局部温度过高而产生软化、熔融甚至焦化现象；锥度增大，锥体上安装空气震击器，用压缩空气脉冲式地震击筒体，把吸附在筒体上的粉料顺畅地击落下来；

2. 主机内所有与物料接触处采用平面或圆弧过渡，接触面都进行打磨、抛光工序处理（精抛至10以上），避免砂眼、死角，杜绝积料堵料；整个机组与物料接触处材质采用不锈钢，保证物料不受污染；与物料接触的传动件都采用良好的密封，可防水防油；出料处用密封蝶阀操作，防止漏风；引风出料管段都采用活连接，可随时拆装清洗消毒灭菌处理等等；

3. 空气予处理系统采用初中高三级空气过滤，净化空气达至十万级；

4. 本机组用PLC程序控制系统回路；触摸屏动画显示工艺流程，具有可操作性，变量操作参数实现模糊技术自动跟踪调节；用变频器稳定安全地调节雾化器；调功器控制进气温度，最大限度地降低能耗；进、出塔内温度、压力数显，可精确设定等等。

Modifications have been made when designing Chinese Herbal Medicine Extract Spraying Dryer:

1. The diameter and height of the tower have to be modified to ensure that powder cannot reach at the wall of the tower before drying, and ensure that powder will have enough dwelling time in hot air to complete low-temperature drying. The wall of the tower has sandwich cooling device to ensure liquid materials not to be softened, melt or coked when they are stuck on the wall that has partial high-temperature. There is air shocker on the cone body which has larger taper and can pulsate the tube by compressed air to shake down powder which is stuck on the tube.

2. All contact place inside the dryer have plain or round surface, and are ground and polished (fine polish over 10) to avoid sand hole and dead angle etc. The contact surface is made of stainless steel to ensure materials free of pollution. The driving parts have good sealing to prevent water and oil. Materials discharge is done by sealed butterfly valve to avoid air leaking. Discharge pipes are connected flexibly for easy dismantling in order.

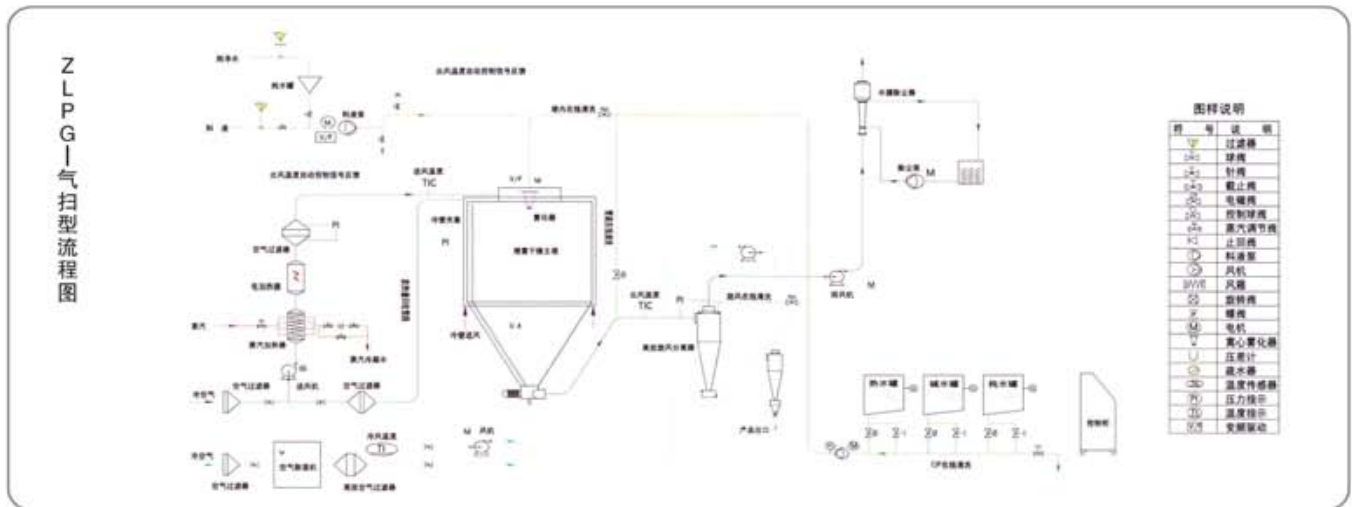
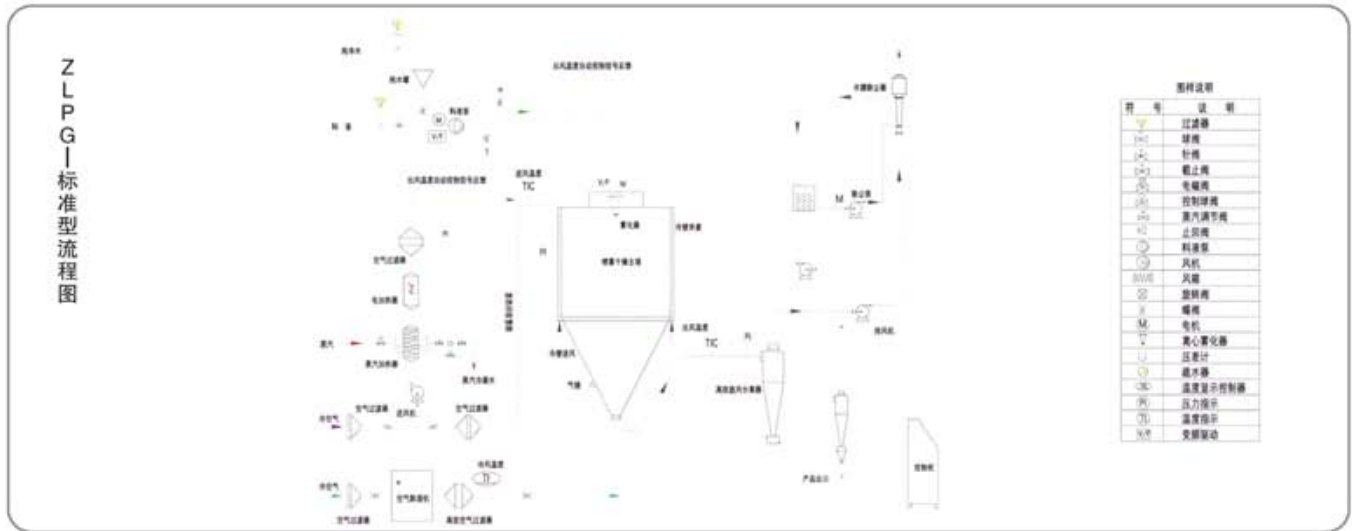
3. Three-stage air filters are used on air pre-treatment system and air can be purified up to 100 thousand level.

4. PLC program control system circuit is used and cartoons of contact screen displays technological process. Variable data carries out automatic trace and regulation by fuzzy technique, the atomizer is adjusted stably by frequency converter, temperature of incoming air is adjusted by the power-regulator, precision can teach plus and minus two so as to largely reduce energy consumption. Incoming and outgoing temperature as well as pressure inside the tower can be set up precisely.

ZLPG型中药浸膏喷雾干燥机组

ZLPG Model Chinese Herbal Medicine Extract Spraying Dryer

工艺流程简图 Sketch of Flow Chart



技术参数 Technical Parameters

型号 Model	ZLPG-5	ZLPG-10	ZLPG-25	ZLPG-50	ZLPG-80	ZLPG-100	ZLPG-150	ZLPG-200	ZLPG-300	
水份蒸发量 Evaporated amount of moisture(kg/h)	5	10	25	50	80	100	150	200	300	
料液处理量 Handle amount of raw material liquid(kg/h)	6-7	12-14	25-34	50-68	80-108	100-135	150-203	200-270	300-406	
成品产量 Output of finished product(kg/h)	1-2	2-4	4.8-7.2	9.2-14	14.8-22.4	18.4-28	28-42	36.8-56.4	55-85	
湿物料含固量 Solid content of damp raw material(%)	18-25 %									
成品含水率 Ratio of moisture of finished product(%)	3-5 %									
电功率 Electric power(kw)	36	45	63	99	132	153	204	246	330	
加热源 Heating source	蒸汽+电 Steam plus electricity									
产品捕集方式及效率 Collecting way of product and its efficiency	两级旋风除尘器或一级旋风除尘器及一级湿式除尘器 >95% Two-grade cyclone duster or one-grade cyclone duster and one-grade damp duster >95%									
自控仪表 Automatic control meters and instruments	热风温度及排风湿度指示, 自动调节温控仪 Indicator of temperature of hot air and humidity of air exhaust									
进风温度 Temperature of air in(°C)	150-200									
出风温度 Temperature of air out(°C)	80-100									
外形尺寸 Overall dimensions(mm)	长 L	5000	5500	7000	8000	9800	11000	12200	14100	15000
	宽 W	3000	3500	4000	5000	5700	6200	7000	7800	9000
	高 H	4500	4600	5200	6500	7600	8100	9000	9850	11100

注: 实际外形尺寸可根据客户实际情况确定, 以上尺寸仅供参考。

Note: The actual dimensions are in accordance with the customer's requirement, the above dimensions are only for reference.

LPG型离心式喷雾干燥机

LPG Model Centrifugal Atomizing Dryer

概述 Descriptions



喷雾干燥是液体工艺成形和干燥工业中最广泛应用的工艺。最适用于从溶液、乳液、悬浮液和糊状液体原料中生成粉状、颗粒状固体产品。因此，当成品的颗粒大小分布、残留水份含量、堆积密度和颗粒形状必须符合精确的标准时，喷雾干燥是一道十分理想的工艺。

The spray drying is the widest used technology in the liquid technology shaping and in the drying industry. It is most suitable for producing powder, particle or block solid products from materials of solution, emulsion, soliquid and pumpable paste states. Therefore, when the particle size and distribution of the final products, their residual water contents, the stocking density and the particle shape must meet the precision standard, the spray drying is one of the most desired technologies.

工作原理 Principle of Work

空气经过过滤和加热，进入干燥器顶部空气分配器，热空气呈螺旋状均匀地进入干燥室。料液经塔体顶部的高速离心雾化器，（旋转）喷雾成极细微的雾状液珠，与热空气并流接触，在极短的时间内可干燥为成品。成品连续地由干燥塔底部和旋风分离器中输出，废气由风机排空。

After filtering and heating, the air enters into the air distributor at the top of the dryer. The hot air enters into the drying chamber in the spiral form uniformly. By passing through the high-speed centrifugal spray at the top of the tower, the material liquid will rotate and be sprayed into the extremely fine mist liquid beads. Through the very short time of contacting with heat air, the materials can be dried into the finished products. The finished products will be discharged continuously from the bottom of the drying tower and from the cyclone separator. The waste gas will be discharged by blower.

机组特点与要点 Features

一、特点

1. 干燥速度快，料液经雾化后，表面积大大增加，在热风气流中，瞬间就可蒸发95%-98%的水份，完成干燥时间仅需数秒钟，特别适用于热敏性物料的干燥。

2. 产品具有良好的均匀度、流动性和溶解性，产品纯度高，质量好。

3. 生产过程简化，操作控制方便。对于湿含量40-60%（特殊物料可达90%）的液体能一次干燥成粉粒产品，干燥后不需粉碎和筛选，减少生产工序，提高产品纯度。对产品粒径、松密度、水份，在一定范围内可通过改变操作条件进行调整，控制和管理都很方便。

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 a moment. The time of completing the drying needs only several seconds.

2. It is especially suitable for drying the heat sensitive materials. Its final products own the good uniformity, mobility, dissolving capacity. And the final products are high in purity and good in quality.

3. The production procedure is simple and the operational control is 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 once a time. After the drying, there is no need for smashing and sorting, so as to reduce the operation procedures in the production and enhance the product purity. The product particle diameters, 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.

二、要点

1. 雾化：机组的雾化系统必须确保雾滴大小分布均匀，这是至关重要的。因为这样才能确保产品质量的合格率。

2. 热气流与雾滴的接触：有足够量的热气流进入干燥室时，必须考虑热气流的方向及角度，无论是并流、逆流还是混流确保与雾滴的充分接触，才能进行充分的热交换，这是至关重要的。

3. 管道角度及锥体角度的设计：选择好适合的角度，这是至关重要的，我们从生产的进千台机组中，获取了一些经验数据，可以和大家共享。

Outlines

1. Atomization: Atomizing system must insure the fogdrop distributing uniformly.

2. Contact of hot airflow and fogdrop: When enough hot air enters into drying tower, the flow way and angle have to be considered, no matter co-current flow, adverse current or mixed flow, must insure 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 from production of thousands of this equipments.



电动雾化器 Electric Atomizer

喷雾干燥可分为三个阶段 Spray drying can be divided into four stages:

- 1. 雾化 利用雾化器将料液分散成均匀的雾滴;
- 2. 雾滴与热空气接触 热空气由热风分配器均风后进入干燥室, 与雾滴充分混合并按一定规则运动 (空气与雾滴接触方式或可是并流, 也可以是逆流或者混流);
- 3. 干燥过程 这些雾滴由于具有很大表面积, 在温度与湿度上又与热空气存在显著的“梯度”, 因而强化了“质热”传递过程, 使得雾滴中所含水分迅速汽化蒸发 (过程仅几秒到几十秒), 形成产品颗粒。

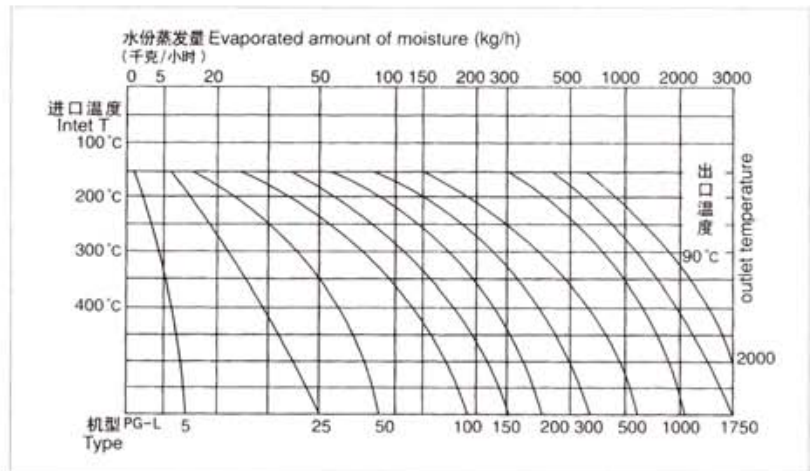
Atomizing: Through atomizer, feed liquid is dispersed into even fogdrop.

Contact of fogdrop and hot air: Through hot air distributor, hot air enters into drying tower, fully mixes with fogdrop and moves in a certain rule(The contact way can be co-current flow, adverse current, mixed flow).

Drying process: Fogdrop has big surface area, and appears obvious “grades” to hot air both in temperature and humidity, thus strengthen the transmission process of “plastid caloric”, moisture of fogdrop is evaporated very quickly (within seconds to tens of seconds).



水份蒸发曲线 Evaporated curve of moisture



干燥实例 Dried samples

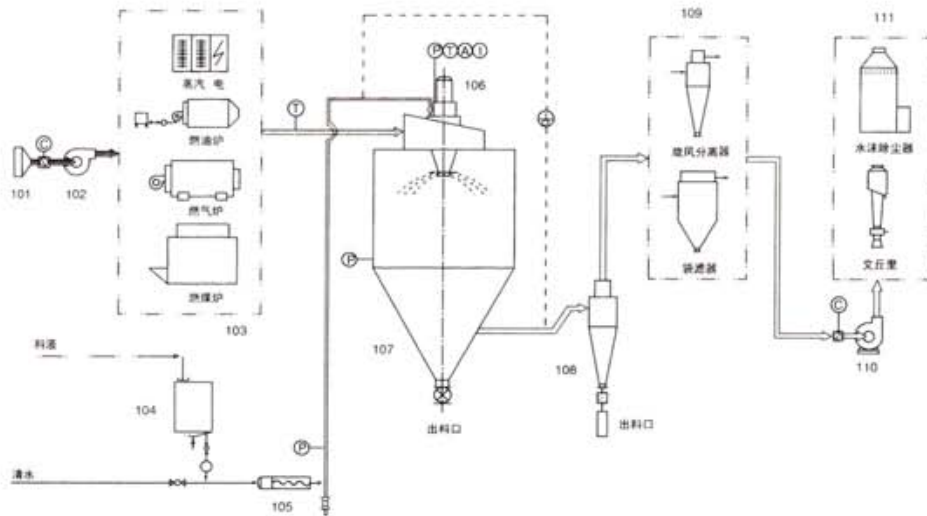
- 食品** 氨基酸、维生素、调味品、蛋白质、奶粉、猪血粉、酱油粉、咖啡、茶粉、葡萄糖、山梨酸钾、果胶、香精香料、蔬菜汁、酵母、淀粉类等
- 陶瓷** 氧化铝、氧化锆、氧化镁、氧化钛、钛酸镁、陶土、瓷土、各种铁氧体及金属氧化物等
- 化学制品** 分散染料、活性染料、有机催化剂、白炭黑、洗衣粉、硫酸锌、二氧化硅、偏硅酸钠、氟化钾、碳酸钙、磷酸钾、无机催化剂、各种废液等。
- Foodstuff** Amino acid, Vitamin, flavoring, protein, dried milk, pig blood powder, soy powder, coffee, tea powder, Glucose, potassium sorbate, pectin, essence, vegetable juice, yeast, starch etc.
- Ceramics** alumina, zirconia, magnesium oxide, titanium oxide, magnesium titanate, pottery clay, china clay, all kinds of magnetic porcelain and metal-oxides etc.
- Chemical products** dispersed dyestuff, active dyestuff, organic catalyst, white carbon black, detergent powder, zinc sulfate, sodium metasilicat, potassium fluoride, calcium carbonate, tribasic potassium phosphate, inorganic catalyst and all kinds of waste liquid etc.



LPG型离心式喷雾干燥机

LPG Model Centrifugal Atomizing Dryer

LPG离心喷雾干燥系统流程示意图 Sketch Diagram of LPG Series High Speed Centrifugal Atomizing Dryer



代号说明

Explanation of code

- 101-滤风罩 Cover of air filter
- 102-送风机 Draught fan
- 103-加热器(电 蒸汽 燃油, 气, 煤)
Heater (Electricity, Steam, Oil fuel, Gas, Coal)
- 104-料槽 Tank of raw material
- 105-供料泵 Supply Pump
- 106-雾化器 Atomizer
- 107-干燥塔 Drying tower
- 108-一级收尘器(旋风分离器)
First grade dust collector (Cyclone)
- 109-二级收尘器(旋风分离器、袋滤器)
Second grade dust collector (Cyclone, Bag filter)
- 110-引风机 Suction fan
- 111-湿式除尘器(水沫除尘器、文丘里)
Damp duster (Powder Duster)

注：用户可根据当地能源情况选定加热方式，根据物料情况选择收尘、除尘方式。
Notes: Customers can choose the way of heating in accordance with the conditions of local energy source and the way of dust removing in accordance with the conditions of raw material.

技术参数 Technical Parameters

项目Item	型号Type(LPG)												
	5	25	50	100	150	200	500	800	1000	2000	3000	4500	6500
入口温度 Inlet temperature(°C)	140-350 自控 Automatically controlled												
出口温度 Outlet temperature(°C)	80-90												
喷雾形式 Way of atomizing	高速离心雾化器 (机械传动或无级变频调速可供选择) High speed centrifugal atomizer												
最大水份蒸发量 Water evaporation capacity(kg/h)	5	25	50	100	150	200	500	800	1000	2000	3000	4500	6500
雾化器转速 Speed of atomizer(rpm)	25000	22000	21500	18000		16000		12000-13000		11000-12000			
雾化盘直径 Diameter of atomizing tray(mm)	60		120		150			180-210		根据工艺要求确定 Decided in accordance with the requirements of process			
电加热最大功率 Max Electric heating power(kw)	9	31.5	60	81	99								
占地长度 Length of covered area(m)	1.6	4	4.5	5.2	7	7.5	12.5	13.5	14.5	根据工艺流程、场地条件及用户要求确定 Decided in accordance with the flow chart, condition of field and requirements of customers			
占地宽度 Width of occupied area(m)	1.1	2.7	2.8	3.5	5.5	6	8	12	14				
塔体高度 Height of tower body(m)	1.75	4.5	5.5	6.7	7.2	8	10	11	15				
喷头吊装高度 Hoisting height of nozzle(m)	--	2.5	2.5	3.2	3.2	3.2	3.2	3.2	3.2				

注：水份蒸发量与物料特性、含固量及热风进出口温度有关。用户可根据当地能源情况选定加热方式，根据物料特性选择收尘、除尘方式。
Notes: The evaporated amount of moisture is concerned with characteristics of raw material, solid content and temperature of hot air inlet and outlet. Customers can choose the way of heating in accordance with the conditions of local energy source and the way of dust removing in accordance with the conditions of raw material.

干燥实例

物料名称	进料湿含量	产品湿含量%	热风进口温度/°C	废气排出温度/°C
全脂奶粉	50	3	240	95
光学增白	50	5	350	85
氯化钾	60	1	550	170
大豆酱油	60	3	200	95
麦芽糖糊精	30	5	300	100
二氧化锰	55	2.5	350	160
硫酸钡	40	1	375	110
氯化铜	50	1.5	400	110
洗涤剂	30	10	350	110
鸡蛋(全部)	76	4	200	85
鸡蛋清	78	8	200	85
鸡蛋黄	58	4	200	90
酶类	60	5	180	100
鱼蛋白水解物	60	5	300	100
调味品	50	5	180	95
除草剂	50	4	250	110
高岭土	35	3	600	120
甘草萃取液	55	2.5	250	95
维生素B2	80	3-5	180	80
银杏黄铜	60	5	210	100
白血朐	75	7	220	80
亚硫酸盐	55	4	250	110
酒精黑液	80	2	180-220	80-85
果实丹宁	80	4	200	85
动物血	70-80	6	220	85
亚硫酸铁	50	2	240	95
氨基酸	75-80	4	220	85
南瓜粉	90	5	190	85
硫酸钴	70	1	320	110
糊精	50	2	200	80
酱油	70	4	200	80
大蒜	60	6	180	80
MCPA—钠盐	50	4	260	85
硫酸钙	70	1	390	110
氧化铝	60	2	300	95

注：以上参数仅供参考

YPG型压力式喷雾造粒干燥机

YPG Model Pressure Atomizing Granulating Dryer

概述 Descriptions



本机组是一种可以同时完成干燥和造粒的装置。按工艺要求可以调节料液泵的压力、流量、喷孔的大小，得到所需的按一定大小比例的球形颗粒。

本机组工作过程为：料液通过隔膜泵高压输入，喷出雾状液滴，然后同热空气并流下降，大部份粉粒由塔底排料口收集，废气及其微小粉未经旋风分离器分离，废气由抽风机排出，粉末由设在旋风分离器下端的收粉筒收集，风机出口处还可装备二级除尘装置，回收率在96-98%以上。

本机组与物料接触部分的塔体、管道、分离器的材料，均采用 SUS304 制作。在塔体内部与外壳之间有足够的保温层，填充材料为超细玻璃棉，塔体设有观察门、视镜、光源及控制仪表，由电器控制操作台控制和显示。

本机组的热源装置采用蒸汽加热或电加热器，具有操作方便、启动快、结构紧凑、热风干净清洁等优点。另外在电气控制柜内装有电加热器的控制调节装置，使进口温度无级调节。对于缺电地区可采用蒸汽加热或燃煤、燃油热风炉等方式，局部或全部代替电加热装置。

本厂可以根据用户的实际需要不同的加热方式。

This set is an apparatus that can finish drying and granulating at the same time. The needed ball granule with certain size and ratio can be gotten with requirements of process to adjust pressure, flow, and size of atomizing hole.

The working process of set is as follows: the liquid of raw material is pumped in through diaphragm pump. The liquid of raw material atomizes into tiny droplets. Then it gathers with hot air and fall off. Most parts of powder material will be collected through the outlet of discharge at the bottom. The wasted air and fine powder will be collected through collector at the bottom of cyclone. At the outlet it can also be equipped with two grades of duster. Its ratio of recovery will be over 96-98%.

The tower body, pipes and separator of set where will contact with raw material are made of SUS304. There is enough layer of heat preservation between inner and outer case of tower body. The filled material is fine glass cotton. The tower body is also equipped with observation door, sight glass, lamp-house and control meters and instruments that is controlled and displayed through electric control panel.

The heat source of this set may be steam or electric heater. Its features are convenient in operation, quick in start, compact, clean hot air and so on. Moreover being installed control and regulating device inside electric control cabinet, the inlet temperature can be controlled through stepless regulation. The steam, coal fuel or oil fuel can be applied to the place where has no electricity. It can replace electric heating partially or fully. The factory can provide different heating way in accordance with the practical condition of customer.

设备特点 Features of equipment

干燥速度快，料液经雾化后表面积大大增加，在热风气流中，瞬间就可蒸发95-98%的水份，完成干燥的时间仅需十几秒到数十秒钟，特别适用于热敏性物料的干燥。

所得产品为球状颗粒，粒度均匀，流动性好，溶解性好，产品纯度高，质量好。

使用范围广，根据物料的特性，可以用热风干燥，也可以用冷风造粒，对物料的适应性强。

操作简单稳定，控制方便，容易实现自动化作业。

The drying speed is fast. The surface area of liquid raw material after being atomized will be increased greatly. 95-98% of moisture can be evaporated at a moment. The time of drying needs about ten seconds to several tens of seconds. It is suitable for drying heat sensitive material particularly.

The finished product is ball granule with uniform size. Its fluidity and solubility are good. The purity of product is high and its quality is good.

Its scope of application is wide. According to the characteristics of raw material, it can use hot air to dry and can also use cool air to granulate. It has strong adaptability to raw materials.

Its operation is simple and stable and its control is simple and convenient and is easy to realize automatic operation.

YPG型压力式喷雾造粒干燥机 YPG Model Pressure Atomizing Granulating Dryer

适用范围 Scope of Application

喷雾干燥造粒:

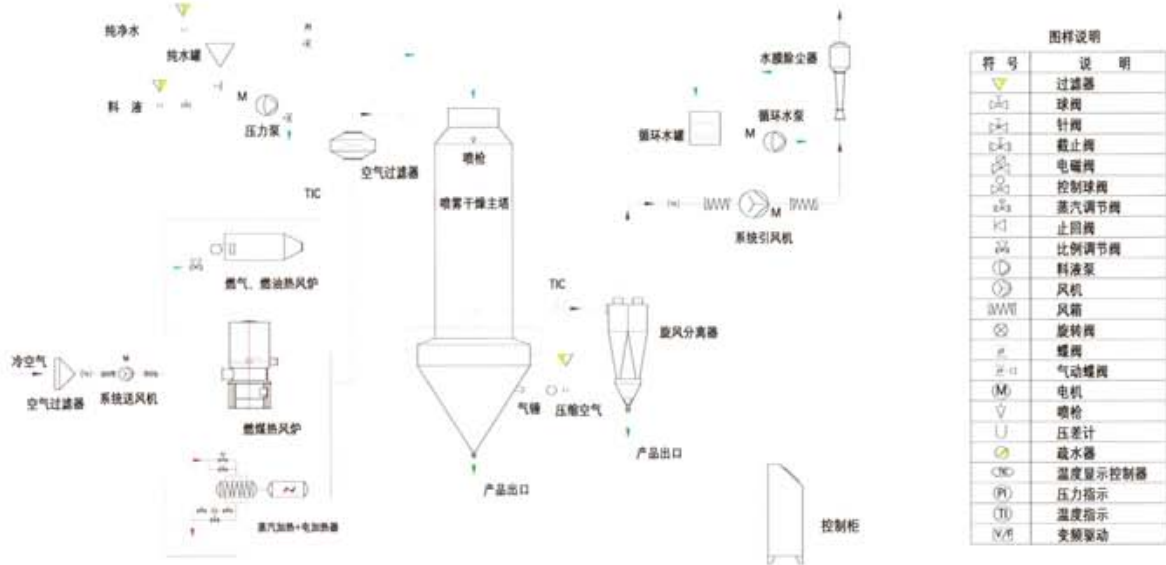
- 化工: 有机催化剂、树脂、合成洗衣粉、油脂类、硫铵、染料、染料中间体、白炭黑、石墨、磷铵等。
- 食品: 氨基酸及类似物、调味料、蛋白质、淀粉、乳制品、咖啡提取物、鱼粉、肉精等。
- 制药: 中成药、农药、抗生素、医药冲剂等。
- 陶瓷: 氧化镁、瓷土、各种金属氧化物、白云石等。
- 喷雾造粒: 各种肥料、氧化铝、陶瓷粉、制药、重金属超硬钢、化肥、粒状洗衣粉、中成药等。

Granulating through atomizing dry:

Chemical industry: organic catalyst, resin, synthetic washing powder, oils, thiamin, dyestuff, intermediate of dyestuff, white carbon black, graphite, ammonium phosphate and so on.
 Foodstuff: amino acids and similar substances, flavoring, protein, starch, dairy products, extractive substance from coffee, fish powder, extractive substance from meat and so on.
 Pharmaceutical: Chinese patent medicines, agrochemicals, antibiotics, medical drinking agent and so on.
 Ceramics: magnesium oxide, kaoline, all kinds of metallic oxide, dolomite and so on.
 Granulating through atomizing: all kinds of fertilizer, aluminum oxide, ceramics powder, pharmaceutical, heavy metallic super hardness steel, chemical fertilizer, washing powder, Chinese patent medicines and so on.



工艺流程简图 Sketch of Flow Chart



技术参数 Technical Parameters

项目Item	型号Model	YPG-25	YPG-50	YPG-100	YPG-150	YPG-200	YPG-300	YPG-500	YPG-1000-2000	
蒸发量Evaporated amount(kg/h) (水粉)		25	50	100	150	200	300	500		
隔膜泵 Diaphragm pump	功率Power(kw)	0.35	4	7.5	11	15	22	30	该指标按实际使用情况确定 The index can be affirmed in accordance with practical conditions.	
	压力Pressure(MPa)	根据物料实验效果在0.6-5之间调节, 一般操作在1-3之间。 It can be regulated from 0.6 to 5, In general, it will be from 1 to 3.								
加热方式Heating way		电electricity	电+蒸汽electricity+steam	电+燃煤(油)热风炉 electricity+coal fuel(oil) hot air furnace						
塔身直径Diameter of tower body(mm)		1300	1800	2400	2600	2800	3200	3800		
设备总高Total height of equipment(mm)		7800	9200	11600	14000	15300	17100	19000		

备注: 1. 蒸发量与物料特性相关, 本表蒸发量与温度相关, 数据仅供参考。
 1.The evaporated amount is related to characteristics of raw material. The evaporated amount listed in the table is related to temperature. The data can be used for reference only.
 2. 雾化压力和泵的型号参照物料处理, 产品粒径要求配备。
 2.The atomizing pressure and Model of pump will be equipped in accordance with the amount of raw material to be treated and the size requirement of product.
 3. 风机功率在配套布袋除尘器后有所增加。
 3.The power of fan should be increased suitably after equipped with cloth bag duster.



HG型滚筒刮板干燥机

HG Model Roller Scraper Dryer



概述 Descriptions

滚筒干燥机是一种内加热传导型转动连续干燥设备。旋转的滚筒通过其下部料槽，粘附着一定厚度的料膜，热量通过管道输送至滚筒内壁，传导到滚筒外壁，再传导给料膜，使料膜中的湿份得到蒸发、脱湿，使含湿份的物料得到干燥。干燥好的物料被装置在滚筒表面的刮刀铲离滚筒，到置于刮刀下方的螺旋输送机，通过螺旋输送机再将干物料集中、包装。

Scraper dryer is a kind of rotating continuous drying equipment with internal heating conducting-style. Certain thickness of materials film attach to the drum from material liquid vessel under the drum. Heat is transferred to the internal wall of the cylinder through pipes and then to the external wall and to materials film, to evaporate the moisture in materials film so as to dry materials. Dried products are then scraped off by the blade fitted on the surface of the cylinder, fall down to the spiral conveyor under the blade, and are conveyed, collected and packed.

特点 Features

热效率高。因滚筒干燥机传热机理属热传导，传热方向在整个操作周期中保持一致，除盖散热和热辐射损失外，其余热量全都用于筒料膜湿份的蒸发上，热效率可达70%-80%。

操作弹性大，适用性广。可调整滚筒干燥机的诸多干燥因素。如进料的浓度、涂料料膜的厚度、加热介质的温度、滚筒的转动速度等，都可以改变滚筒干燥机的干燥效率，且诸多因素互无牵连。这给滚筒干燥操作带来很大方便，使之能适应多种物料的干燥和不同产量的要求。

干燥时间短。物料的干燥周期一般只有10-300秒，最适合于热敏性物料。若将滚筒干燥机设置在真空器中，则可在减压条件下运行。

干燥速率大。由于涂抹于筒壁的料膜很薄，一般在0.3-1.5mm，且传热、传质方向一致，料膜表面可保持20-70kg·H₂O/m²·h的蒸发强度。

High heat efficiency. The principle of heat transfer of the cylinder dryer is heat conduction and the conducting direction keeps identical in the whole operation circle. Except heat loss of end cover and radiation loss, all heat can be used for evaporation of wet materials. The efficiency can reach 70-80%.

Large operation elasticity and wide application. Various drying factors of the dryer can be adjusted, material film, temperature of heating medium, rotating speed of the drum etc. which can change drying speed of the under dryer. As these factors have no interrelations each other, it brings great convenience to dry operation, and makes it applicable to dry various materials and meet different requirements of production.

Short drying period. The drying period of materials is normally 10 to 300 seconds, so it is suitable for heat sensitive materials. It also can be pressure reducing operated if it is put in vacuum vessel.

Fast drying rate. As film of materials coated on the wall of the cylinder is very thin. Normally, thickness is 0.3 to 1.5 mm, plus directions of heat and mass transmitting are identical, the evaporation strength on the surface of the film can be 20-70 kg.H₂O/m²·h



应用范围 Scope of Application

适用于化工、染料、制药、食品、冶金等行业液体或较粘稠物料的干燥。

It is suitable for drying liquid raw materials or thick liquid in chemical, dyestuff, pharmaceutical, foodstuff, metallurgy industries and so on.

技术参数 Technical Parameters

规格 Spec	滚筒尺寸mm sizes of cylinder diameterxLength	有效加热面积m ² effective heating area	干燥能力 Kg.H ₂ O/m ² ·h drying capacity	电机功率kw power of motor	外形尺寸mm sizes LxWxH	重量kg weight
HG-600	Ø600 x 800	1.12	40-70	2.2	1700 × 800 × 1500	850
HG-700	Ø700 x 1000	1.65	60-90	3	2100 × 1000 × 1800	1210
HG-800	Ø800 x 1200	2.26	90-130	4	2500 × 1100 × 1980	1700
HG-1000	Ø1000 x 1400	3.30	130-190	5.5	2700 × 1300 × 2250	2100
HG-1200	Ø1200 x 1500	4.24	160-250	7.5	2800 × 1500 × 2450	2650
HG-1400	Ø1400 x 1600	5.28	210-310	11	3150 × 1700 × 2800	3220
HG-1600	Ø1600 x 1800	6.79	270-400	11	3350 × 1900 × 3150	4350
HG-1800	Ø1800 x 2000	8.48	330-500	15	3600 × 2050 × 3500	5100
HG-1800A	Ø1800 x 2500	10.60	420-630	18.5	4100 × 2050 × 3500	6150

注：如客户需要，可为客户设计制造上部进料双滚筒干燥机。

Note: We can also design double-cylinder with upper material feeding on request.

概述 Summary

HZG型回转圆筒干燥机是一种处理物料量大，能连续干燥的干燥机。它主要由热源、加料装置、转筒、传动装置、出料部分以及尾气除尘装置等组成。

该机生产能力大，适用范围广，流体阻力小，操作上允许波动范围教大，操作方便。干燥后物料含水量可低于1%。

HZG type rotary dryer is a kind of drying equipment that continuates and mass transaction quantity. It consists of heat power, feeding device, rotary drum, driving device, discharge and dust catcher.

This dryer has a big capability, can be used in various situations, fluid resistance is small, admissibility wide scope to operation and easy to control, humidity of feed is less than 1% after drying.



应用范围 Application

适用于化工、冶金、建材、轻工等行业的粉状、颗粒状、块状以及掺入干料的膏状物料。在化工行业中，如硫酸铵、硫化碱、硝酸铵、尿素、草酸、重铬酸钾、聚氯乙烯、二氧化锰、碳酸钙、磷酸钙、硝酸磷肥、钙镁磷肥、磷矿、普通过磷酸钙、重过磷酸钙、碳酸三钠、三聚磷钠等的干燥。

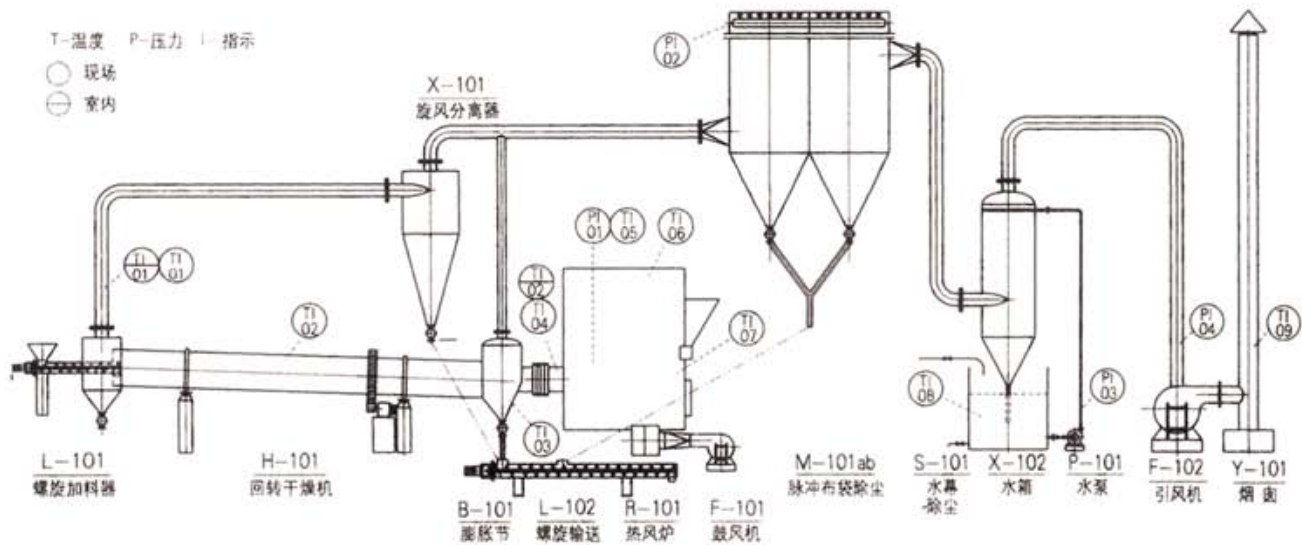
Applicable to powder, particle, piece and power mix in paste of chemical, metallurgy, architectural material and light industry. In chemical industry, it can be used to dry substances like ammonium sulfide, ammonium nitrate, urea, ethane diacid, potassium dichromate, PVC, manganese dioxide, calcium carbonate, calcium phosphate fertilizer, calcium superphosphate (light quality and heavy quality), sodium phosphate, poly-sodium phosphate and etc.

HZG型滚筒干燥机
HZG Model Rotary Drum Dryer



载热体 Heat carrier

热空气、烟道气等。Heated air or fume and etc.



技术参数 Technical Parameters

型号type	筒体 rotary drum		斜度 slope%	转速 turn speed(r/min)	电机功率 power of moto kw	设备重量 weight
	直径 diameter(m)	长度 length(m)				
HZG1.0-6	1.0	6	2-5	2-7	5.5	7
HZG1.0-8	1.0	8	2-5	2-7	5.5	8
HZG1.0-10	1.0	10	2-5	2-7	5.5	9
HZG1.2-8	1.2	8	2-5	2-7	7.5	10
HZG1.2-10	1.2	10	2-5	2-7	7.5	11
HZG1.2-12	1.2	12	2-5	2-7	11	12
HZG1.5-10	1.5	10	2-5	2-5	11	16
HZG1.5-14	1.5	14	2-5	2-5	15	18
HZG1.8-12	1.5	12	2-5	2-5	18.5	20
HZG1.8-14	1.8	14	2-5	2-5	18.5	21
HZG1.8-18	1.8	18	2-5	2-3	22	28
HZG2-18	2	18	2-5	2-3	22	28

型号type	筒体 rotary drum		斜度 slope%	转速 turn speed(r/min)	电机功率 power of moto kw	设备重量 weight
	直径 diameter(m)	长度 length(m)				
HZG2-20	2	20	2-5	2-3	22	30
HZG2.2-18	2.2	18	2-5	2-3	30	34
HZG2.2-20	2.2	20	2-5	2-3	30	36
HZG2.4-18	2.4	18	2-5	2-3	30	42
HZG2.4-22	2.4	22	2-5	2-3	37	46
HZG2.8-18	2.8	18	2-3	1-3	40	75
HZG3-20	3	20	2-3	1-3	55	82
HZG3-25	3	25	2-3	1-3	55	115
HZG3.2-20	3.2	20	2-3	1-3	75	95
HZG3.5-20	3.5	20	2-3	1-3	75	109
HZG3.5-25	3.5	25	2-3	1-3	75	135
HZG3.5-30	3.5	30	2-3	1-3	110	164



PLG型盘式连续干燥机

PLG Model Continuous Plate Dryer

原理 Principle



湿物料自加料器连续地加到干燥器上部第一层干燥盘上，带有耙叶的耙臂作回转运动使耙臂作回转运动使耙叶连续地翻抄物料。物料沿指数螺旋线流过干燥盘表面，在小干燥盘上的物料被移送到外缘，并在外缘落到下方的大干燥盘外缘，在大干燥盘上物料向里移动并从中间落料口落入下一层小干燥盘中。大小干燥盘上下交替排列，物料得以连续地流过整个干燥器。中空的干燥盘内通入加热介质，加热介质形式只有热水和导热油，加热介质由干燥盘的一端进入，从另一端导出。已干物料从最后一层干燥盘落到壳体的底层，最后被耙叶移送到出料口排出。湿份从物料中逸出，由设在顶盖上的排湿口排出，真空型盘式干燥器的湿气由设在顶盖上的真空泵口抽出。从底层排出的干物料可直接包装。通过配加翅片加热器、溶剂回收冷凝器、袋式除尘器、干料返混机构、引风机等辅机，可提高其干燥的生产能力，干燥膏糊状和热敏性物料，可方便地回收溶剂，并能进行热解和反应操作。

Wet materials are fed continuously to the top drying layer in the dryer. They will be turned and stirred continuously by harrows when the harrow's arm rotates, the material flows through the surface of the drying plate along the exponential helical line. On the small drying plate the material will be moved to its exterior edge and drop down to the exterior edge of the large drying plate underneath, and will then 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 materials can go through the whole dryer continuously. The heating media, which could be saturated steam, hot water or thermal oil will be led into hollow drying plates from one end to other end of the dryer. The dried product will drop from the last layer of the drying plate to the bottom layer of the shell body, and will be moved by harrows to the discharge port on the top cover, or sucked out by the vacuum pump on the top cover for vacuum-type plate dryer. The dried product 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 recovery, bag dust filter, return and mix mechanism for dried materials and suction fan etc. solvent in those paste state and heat sensitive materials can be easily recovered, and thermal de-composition and reaction can be also carried out.

概述 Descriptions

盘式连续干燥器是一种高效的传导型连续干燥设备。其独特的结构和工作原理决定了它具有热效率高、能耗低、占地面积小、配置简单、操作控制方便、操作环境好等特点，广泛适用于化工、医药、农药、食品、饲料、农副产品加工行业的干燥作业。在各行业使用实践中深受好评。现生产制造常压、密闭、真空三大类型，1200、1500、2200、3000四种规格，A(碳钢)、B(接触物料部分均匀不锈钢)、C(在B的基础上，增加蒸汽管路，主轴及支架为不锈钢，筒体和顶盖内衬不锈钢)。三种材质，干燥面积4-180m²，共几百种型号的系列产品，并能提供与之相配套的种辅助设备，可满足用户对各种物料进行干燥的需要。

PLG series continus plate dryer is a kind of high efficiency conducting and continuous drying equipment. Its unique structure and operating principle provide advantages of high heat efficiency, low energy control as well as good operating environment ect. It is widely used in drying process in the fields of chemical, pharmaceutical, agricultural chemicals, foodstuff, fodder, process of agricultural and by-products etc., and is well received by various industries. Now there are three big categories, normal pressure, close and cacuum styles and four specificaations of 1200, 1500, 2200 and 3000; and three kinds of constructions A (carbon steel), B (stainless steel for contact parts) and C (on the basis of B to and add stainless steel for steam pipes, main shaft and support, and stainless steel linings for cylinder body and top cover). With a drying area of 4 to 180 square meters, now we have hundreds of models of series products and various kinds of auxiliary devices available to meet requirements of various products.

特点 Features

(一)调控容易、适用性强

- 1、通过调整料层厚度、主轴转速、耙臂数量、耙叶型式和尺寸可使干燥过程达到最佳。
- 2、每层干燥盘皆可单独通入热介质或冷介质，对物料进行加热或冷却，物料温度控制准确、容易
- 3、物料的停留时间可以精确调整
- 4、物料流向单一，无返混现象，干燥均匀、质量稳定、不需再混合

(二)操作简单、容易

- 1、干燥器的开车、停车操作非常简单
 - 2、停止进料后，传送物料耙叶能很快地排空干燥器内的物料。
 - 3、通过特殊的大规格检视门的视镜，可以对设备内进行很仔细清洗和观察
- 层很薄，主轴转速低，物料传送系统需要的功率小，电耗少。
- 4、以传导热进行干燥，热效率高，能量消耗低。

四)操作环境好，可回收溶剂，粉尘排放符合要求

- 1、常压型：由于设备内气流速度低，而且设备内湿度分布上高下低，粉尘很难浮到设备顶部，所以顶部排湿排出的尾气中几乎不含有粉尘。
- 2、密闭型：配有溶剂回收装置，可方便地回收载湿气体中的有机溶剂。溶剂回收装置简单，回收率高，对于易燃、易爆、有毒和易氧化的物料，可用氮气作为载湿气体进行闭路循环，使之安全操作。特别适用于易燃、易爆、有毒物料的干燥
- 3、真空型：在真空状态下操作的盘式干燥器，特别适用于热敏性物料的干燥

五)安装方便、占地面积小

- 1、干燥器整体出厂，整体运输，只需吊装就位，安装定位非常容易
- 2、由于干燥盘层式布置，立式安装，即使干燥面积很大，占地面积也很小。

1. Easy control, wide application

- (1) Regulate thickness of materials, rotating speed of main shaft, number of harrow sarm, style and sizes of harrows achieve best drying process.
- (2) Each layer of drying plate can be fed with hot or cold media individually to heat or cold materials and make temperature control accurately and easily.

(3) Dwell time of materials can be accurately adjusted.

(4) Single flowing direction of materials without return flowing and mixing.

2. Easy and simple operation

- (1) Start stop of dryer is quite simple.
- (2) After material feeding is stopped, they can be easily discharged out of the dryer by harrows.
- (3) Careful cleaning and observation can be carried inside the equipment through large-scale viewing window.

3. Low energy consumption

- (1) Thin layer of materials, low speed of main shaft, small power and energy required for conveying system of materials
- (2) Dry by conducting heat so it is has high heating efficiency and low energy consumption.

4. Good operation environment, solvent can be recovered and powder discharge meet the requirement of exhaust.

(1) Normal pressure type: as low speed of air flow inside the equipment and moisture being high in upper part and low in lower part, dust powder couldn't float to the equipment, so there is almost no dust powder in tail gas discharged from the moist discharge part on the top.

(2) Closed type: equipped with solvent recovery device that can recover organic solvent easily from moist-carrier gas. The solvent recovery device has simple structure and high recovery rate, and nitrogen can be used as moist-carrier gas in closed circulation for those subject to burning, explosion and oxidation, and poisonous materials for safe operation. Especially suitable for drying flammable, explosive and poisonous materials.

(3) Vacuum type: if the plate dryer is operating under vacuum state, it is particularly suitable for drying heat sensitive materials.

5. Easy installation and small occupying area.

- (1) As the dryer is in a whole for delivery, it is quite easy to install and fix at site only by hoisting.
- (2) As drying plates being arranged by layer and installed vertically, it takes a small occupying area but large drying area.

应用 Applications

干燥 热解 燃烧 冷却 反应
升华

- (一) 有机化工产品
- (二) 无机化工产品
- (三) 医药、食品
- (四) 饲料、肥料

Drying, heat decomposition, combustion, cooling, reaction, and sublimation

1. Organic chemicals
2. Mineral chemicals
3. Pharmaceutical and foodstuff
4. Feed and fertilizer

PLG型盘式连续干燥机

PLG Model Continuous Plate Dryer

技术特性 Features of technology

(一) 干燥盘

1. 设计压力: 一般为 0.4MPa。
2. 最高使用压力: 一般 < 0.4MPa。
3. 加热介质: 热水、导热油, 干燥盘温度 100℃ 时用热水加热, 100℃ - 300℃ 时用导热油加热, >320℃ 时可采用电、导热油、熔盐等方式加热。

(二) 物料传送系统

1. 主轴转速: 1 - 10 转分, 电磁或变频无级调速。
2. 耙臂: 每层干燥盘上有 2 - 8 支固定在主轴上的耙臂。
3. 耙叶: 绞接在耙臂上, 能随盘面上下浮动保持接触, 有多种形式。
4. 碾滚: 对易结块和需要破碎的物料, 在适当位置配加碾滚, 可以强化传热和干燥过程。

(三) 壳体

有常压、密闭、真空三种型式

1. 常压型: 圆筒或八棱柱形, 有整体和对开两种结构, 加热介质进出口主管道可以在壳体内, 也可以在壳体外。
2. 密闭型: 圆筒形壳体, 能承受 5Kpa 内压, 加热介质进出口主管道可以在壳体内, 也可以在壳体外。
3. 真空型: 圆筒形壳体, 设计压力为外压 0.1MPa, 加热介质进出口主管道在壳体内。

(四) 空气加热器

一般在蒸发量较大的情况下使用, 以增强干燥效率。

1. Drying plate

- (1) Designing pressure: general is 0.4MPa.
- (2) Work pressure: general is less than 0.4MPa.
- (3) Heating medium: hot water, oil. When the drying plates' temperature is 100°C, hot water can be used; when 100°C-300°C, it will be oil; when >320°C it will be heated by electric, oil or fused salt.

2. Material transmission system

- (1) headstock revolution: 1-10rpm, electromagnetism of transducer timing.
- (2) harrow arm: There are 2 to 8 pieces arm that be fixed on the headstock on each layers.
- (3) Harrow's blade: Surrounding the harrow's blade, float together with the surface of the plate to keep contact. There're various of types.
- (4) Roller: for the products easily agglomerate, or with the requirements of grinding, the heat transfer and drying process might be reinforced by placing roller(s) at the appropriate place(s).

3. Shell

There're three types for option: normal pressure, sealed and vacuum

- (1) Normal pressure: cylinder or eight prism and there are two structures: whole or bisect. The main entrance pipeline of heating medium will be inside or outside of the shell.
- (2) Sealed: Cylindrical shell, could bear the interior pressure of 5KPa, the main ducts of the inlet and outlet of heating media might be inside of the shell or outside.
- (3) Vacuum: Cylindrical shell, could bear the exterior pressure of 0.1MPa. The main ducts of inlet and outlet is inside of the shell.

4. Air heater

Normal for the application of big evaporation capacity to increase drying efficiency.

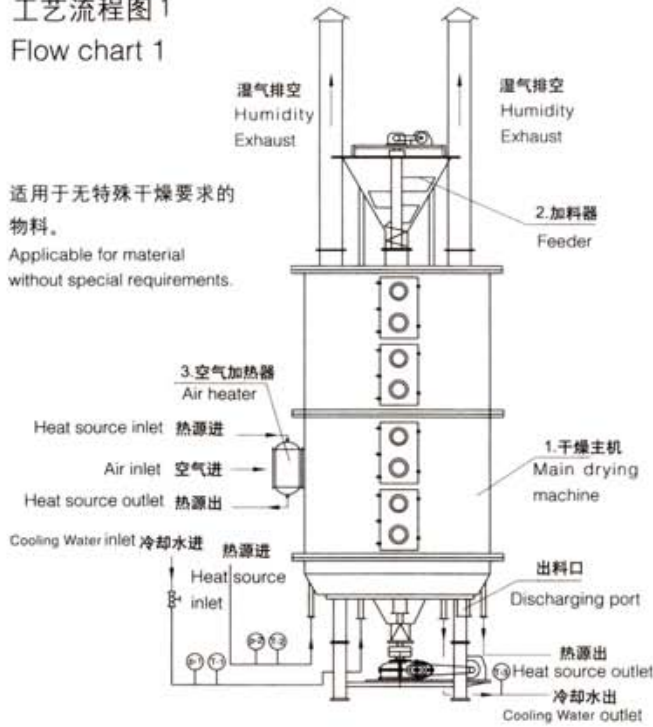
技术参数 Technical parameters

规格 spec	外径 mm diameter	高度 mm height	干燥面积 m ² area of dry	功率 Kw power	
1200/4	1850	2608	3.3	1.1	
1200/6		3028	4.9		
1200/8		3448	6.6	1.5	
1200/10		3868	8.2		
1200/12		4288	9.9		
1500/6		3022	8.0		2.2
1500/8	3442	10.7			
1500/10	2100	3862	13.4	3.0	
1500/12		4282	16.1		
1500/14		4702	18.8		
1500/16		5122	21.5		
2200/6		2900	3262	18.5	3.0
2200/8			3682	24.6	
2200/10	4102		30.8	4.0	
2200/12	4522		36.9		
2200/14	4942		43.1		
2200/16	5362		49.3		
2200/18	2900		5782	55.4	5.5
2200/20			6202	61.6	
2200/22		6622	67.7	7.5	
2200/24		7042	73.9		
2200/26		7462	80.0		
3000/8		3800	4050		48
3000/10	4650		60		
3000/12	5250		72		
3000/14	5850		84		
3000/16	6450		96	13	
3000/18	7050		108		
3000/20	7650		120		
3000/22	8250		132		
3000/24	8850		144		
3000/26	9450		156		15
3000/28	10050	168			
3000/30	10650	180			

工艺流程图 Flow chart

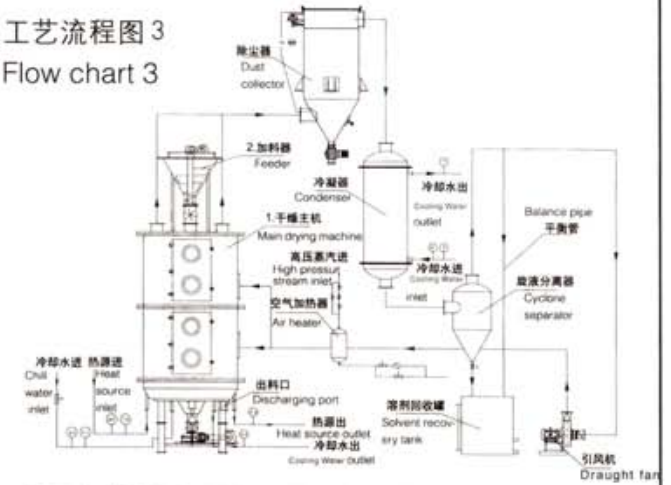
工艺流程图 1
Flow chart 1

适用于无特殊干燥要求的物料。
Applicable for material without special requirements.



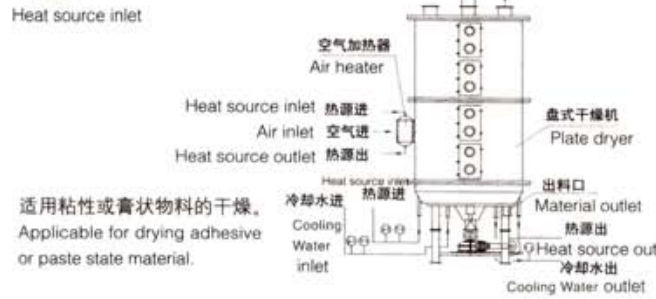
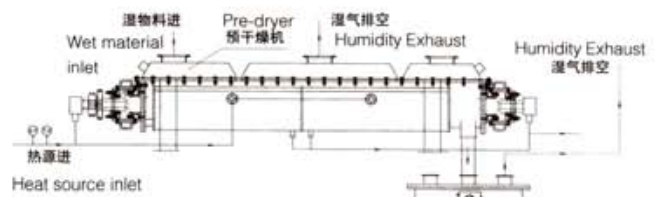
备注：一般在蒸发量较大的情况下才配备空气加热器，以增大干燥效率。
Remarks: to enhance drying efficiency, air heater is normally applied for high evaporation capacity

工艺流程图 3
Flow chart 3



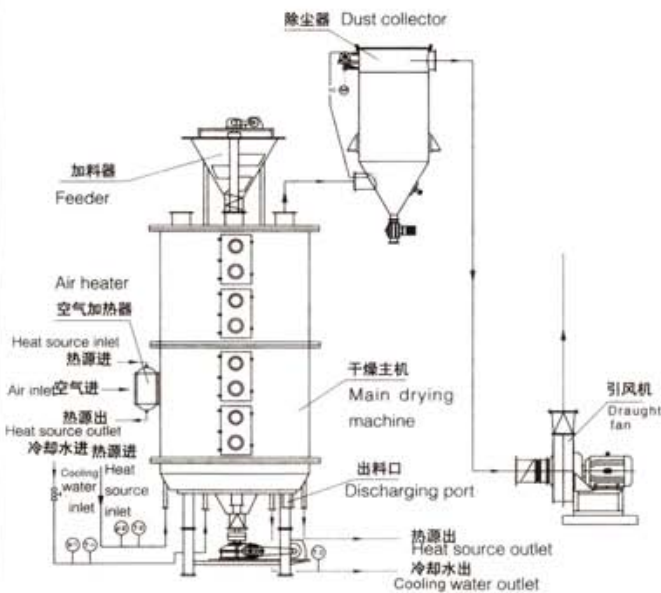
适用于干燥过程中所蒸发出来的溶剂进行回收或是对干燥所用气体要求不能外泄的场合。
Applicable for the drying process with solvent recovery or without leakage of evaporated gas.

工艺流程图 4
Flow chart 4



适用粘性或膏状物料的干燥。
Applicable for drying adhesive or paste state material.

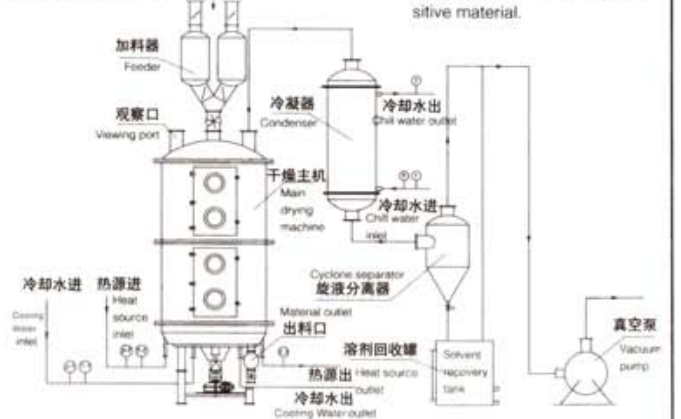
工艺流程图 2
Flow chart 2



适用于干燥物料的粉末需要回收或具有一定的有害粉末。
Applicable for drying material with requirements of powder recovery or the powder is toxic.

工艺流程图 5
Flow chart 5

适用于热敏性物料的干燥。
Applicable for drying heat sensitive material.



概述 Descriptions

该产品可对膏状、颗粒状、粉状、浆状物料间接加热或冷却，可完成干燥、冷却、加热、灭菌、反应、低温燃烧等单元操作。设备中特殊的楔型搅拌传热浆叶，具有较高的传热效率和传热面自清洁功能。

空心轴上密集排列着楔型中空浆叶，热介质从空心轴流向浆叶。单位有效容积内传热面积很大。热介质温度从 -40°C 到 320°C ，可以是水，也可以是其他液体，如热水、导热油等。间接传导加热没有携带空气带走热量，热量均用来加热物料。热量损失仅为通过壳体保温层向环境的散热。楔型浆叶传热面具有清洁功能。物料颗粒与楔型面的相对运动产生洗刷作用，能够洗刷掉楔型面上附着物料，使运转中一直保持着清洁的传热面。浆叶干燥机的壳体为 Ω 型，壳体内一般安排二到四根空心搅拌轴。壳体有密封端盖与上盖，为防止物料粉尘外泄而充分发挥作用。传热介质通过旋转接头，流经壳体夹套及空心搅拌轴，空心搅拌轴依据热介质的类型而具有不同的内部结构，以保证最佳的传热效果。



Applicable for drying or cooling of paste, particle, powder and slurry state of material, perform the process of drying, cooling, heating, sterilizing, reacting and combustion under low temperature. The special stirring and heating transferring blade, makes high heat transferring efficiency, and provide self cleaning function. The special chock shaped stirring and heat transferring blade has high heating efficiency and self-cleaning function of the heating transferring surface.

Hollow chock shaped blades are concentrated on the hollow shaft. Heat media flow through the blade from the hollow shaft. The heat transferring area in the effective volume is very high. The temperature range of heating media is -40°C to 320°C . It might be steam, or liquid state, such as steam, thermal oil etc. Indirect heating, there's no heat carried out by air. All heat is utilized for to drying the material except the lost of heat insulation layers. The surface of chock shaped blade has self-cleaning function. The relative movements of the product particles and the chocked shaped surface might clean the material attached to the chock shaped surface, so to keep the cleanliness of heat transferring surface during working. The shell of hollow blade dryer is Ω shape. 2 Or 4 pieces of hollow stirring shaft are usually equipped in the shell. To avoid any leakage of material, there're sealed terminal cover and top cover with the shell. The heat transferring media flow through the rotation connector, jacket's shell and hollow stirring shaft. To ensure best transferring effect, the hollow stirring shaft adopts different interior structure in accordance with different heating media.

特点 Features

1、桨叶干燥机能耗低由于间接加热，没有携带大量空气而带走热量，干燥器外壁又设置保温层，对浆状物料，蒸发1kg水仅需少量热量。

2、桨叶干燥机系统造价低单位有效容积内拥有巨大的传热面，就缩短了处理时间。因设备尺寸变小，减少了建筑面积和建筑空间。

3、处理物料范围广使用不同热介质，既可处理热敏性物料，又可处理需高温处理的物料。常用介质有水蒸汽、导热油、热水、冷却水等。既可连续操作也可间歇操作，可在很多领域应用。

4、环境污染小：不使用携带空气，粉末物料夹带很少。物料溶剂蒸发量很小，便于处理。对有污染的物料或需回收溶剂的工况，可采用闭路循环。

5、操作费用低：该设备正常操作，仅1小时/天·人。低速搅拌及合理的结构。磨损量小，维修费用很低。

6、操作稳定：由于楔型桨叶特殊的压缩——膨胀搅拌作用，使物料颗粒充分与传热面接触，在轴向区间内，物料的温度、湿度、混合度梯度很小，从而保证了工艺的稳定性。

1.The heat consumption of blade is low: No heat carried out by the air because of indirect heating; there's no heat insulation layer with the exterior wall of the dryer. It consumes to evaporate 1kg of water for to drying slurry state of material.

2.The cost of the blade dryer is low: The unit effective volume has very large heat transferring surface, so the processing time is shorted, the size of the equipment becomes small. The building area and place are sharply decreased.

3.The range of material to be processed is wide: Heat sensitive material and the materials to be processed under high temperature might be processed with different heating media. The normal media are: steam, thermal oil, hot water and chill water. It might be continuous or batch operation. widely used in many areas.

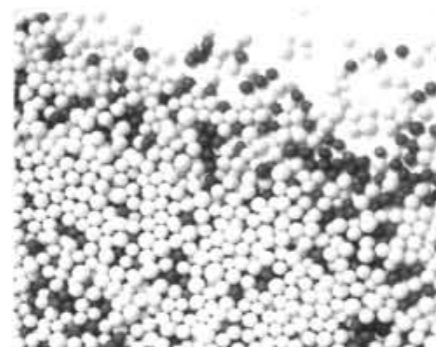
4.The pollution is less: Without any carrying air, very few powder is carried out. The solvent evaporated is very few, it easy to be processed. For the material that might cause pollution or the solvent to be recovered, it might adopt sealed circulation.

5.The operation cost is low: 1 hour/day operator is enough for normal operation. Low stirring speed and reasonable structure, the worn amount is few; and the maintenance fee is low.

6.Steady operation: The material particles fully contact heat transferring surface, because of the special compressing and swell-stirring effect of the chock shaped blade. The difference of the temperature, humidity and mixing effect are very small in the different axial area, so to ensure the stability of process.

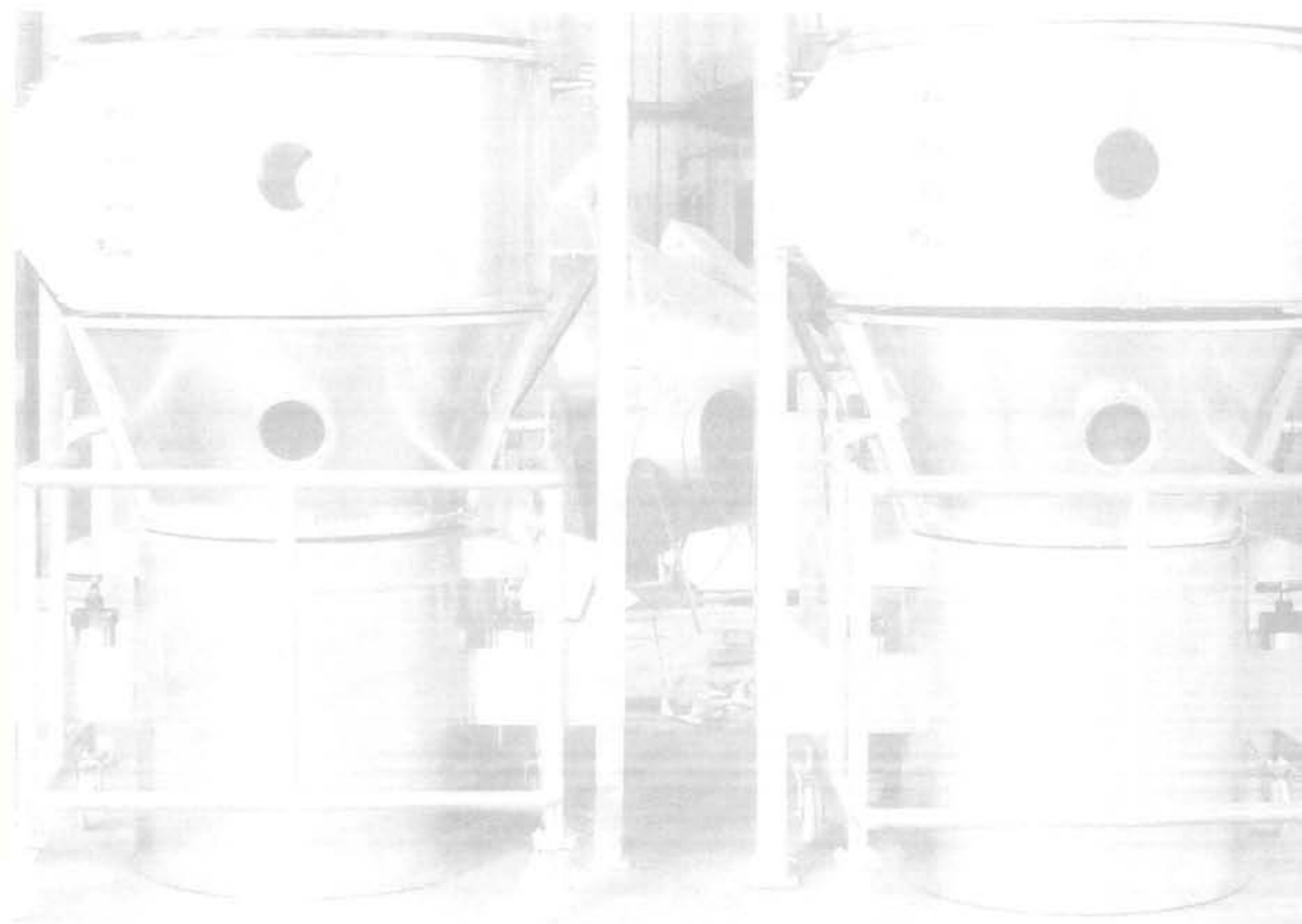
技术参数 Technical Parameters

型号\项目	KJG-3	KJG-9	KJG-13	KJG-18	KJG-29	KJG-41	KJG-52	KJG-68	KJG-81	KJG-95	KJG-110
传热面积m ²	3	9	13	18	29	41	52	68	81	95	110
有效容积m ³	0.06	0.32	0.59	1.09	1.85	2.8	3.96	5.21	6.43	8.07	9.46
转速范围r.m.p	15-30	10-25	10-25	10-20	10-20	10-20	10-20	10-20	5-15	5-15	5-10
功率kw	2.2	4	5.5	7.5	11	15	30	45	55	75	95
器体宽A mm	306	584	762	940	1118	1296	1474	1652	1828	2032	2210
总宽B mm	736	841	1066	1320	1474	1676	1854	2134	1186	2438	2668
器体长C mm	1956	2820	3048	3328	4114	4724	5258	5842	6020	6124	6122
总长D mm	2972	4876	5486	5918	6808	7570	8306	9296	9678	9704	9880
进出料距E mm	1752	2540	2768	3048	3810	4420	4954	5384	5562	5664	5664
中心高F mm	380	380	534	610	762	915	1066	1220	1220	1220	1220
总高H mm	762	838	1092	1270	1524	1778	2032	2362	2464	2566	2668
进汽口N(寸)	3/4	3/4	1	1	1	1	1 1/2	1 1/2	1 1/2	1 1/2	2
出水口O(寸)	3/4	3/4	1	1	1	1	1 1/2	1 1/2	1 1/2	1 1/2	2



Granulator Series

制粒设备系列



FL型沸腾制粒机 FL Model Fluidized Granulator



原 理 Principle

物料粉末粒子，在原料容器（流化床）中呈环形流化状态，受到经过净化后的加热空气预热和混合，将粘合剂溶液雾化喷入，使若干粒子聚集成含有粘合剂的团粒。由于热空气对物料的不断干燥，使团粒中水分蒸发，粘合剂凝固，此过程不断重复进行，形成理想的、均匀的多微孔球状颗粒。

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



特 点 Features

- 通过粉体造粒，改善流动性，减少粉尘飞扬；
- 通过粉体造粒改善其溶解性能；
- 混合、制粒、干燥在一机内完成一步法制粒；
- 采用抗静电滤布，设备操作安全；
- 设置压力泄放孔，一旦发生爆炸，设备人员不受伤害；
- 设备无死角，装卸料轻便快速，冲洗干净，满足GMP规范。

Through powder granulating, the flow property is improved and the dust is reduced;

Through powder granulating, its solving property is improved;

The mixing, granulating and drying can be completed in one step inside the machine;

The operation of equipment is safe because the anti static filtering cloth is adopted;

The operation personnel can not be damaged if explosion take place because of the releasing hole;

The equipment has no dead corner. Therefore the loading and unloading, quick and light and clean. It can meet the requirements of GMP.

应 用 Applications

制药工业中的造粒：片剂颗粒、冲剂颗粒、胶囊剂颗粒。

食品工业的造粒：可可、咖啡、奶粉、颗粒果汁、调味品等。

其它行业的造粒：农药、饲料、化肥、颜料、染料化工等。

粉状或颗粒状湿物料的干燥。

包衣：颗粒、丸剂保护层、备色、缓释、薄膜、肠溶包衣等。

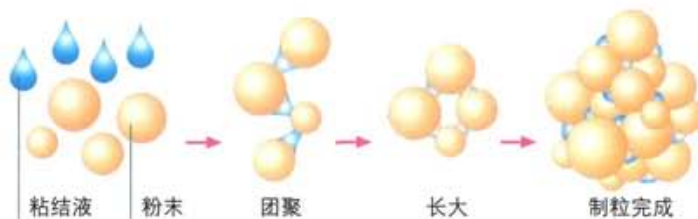
Pharmaceutical industry: tablet, capsule, low sugar or no sugar granule of Chinese medicine.

Foodstuff: cocoa, coffee, milk powder, juice of granulate, flavoring and so on.

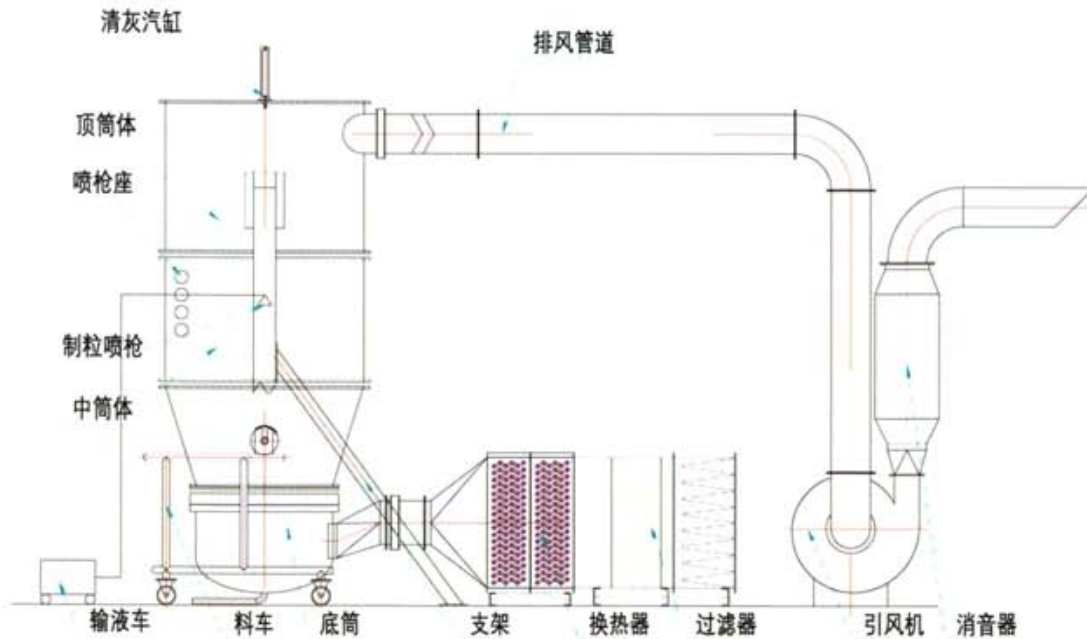
Other industries: pesticide, feed chemical fertilizer, pigment, dyestuff and so on.

Drying: powder or granule material

Coating: granuler, protecting coat of pellet, spare color, slow release film, bowel-dissolve coating ,etc.



流程图 Flow Chart



技术参数 Technical Parameters

项目Item		单位Unit	FL机 型Type								
			3	5	15	30	60	120	200	300	500
原料容器 Container	容量Volume	L	12	22	45	100	220	420	670	1000	1500
	直径Diameter	mm	300	400	550	700	1000	1200	1400	1600	1800
生产能力 Capability	最小Min	kg	1.5	4	10	15	30	80	100	150	250
	最大Max	kg	4.5	6	20	45	90	160	300	450	750
风机Fan	风量Capacity	m ³ /h	1000	1200	1400	1800	3000	4500	6000	7000	8000
	风压Pressure	mm H ₂ O	375	375	480	480	950	950	950	950	950
	功率Power	kw	3	4	5.5	7.5	11	18.5	22	30	45
蒸汽消耗量Steam consumption		kg/h	15	23	42	70	141	211	282	366	451
压缩空气耗量Compressed air consumption		m ³ /min	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.5	1.5
主机重量Weight of the main body		kg	500	700	900	1000	1100	1300	1500	1800	2000
蒸汽压力Steam pressure		Mpa	0.3~0.6								
温度Temperature		℃	室温-120℃ 范围内可调节 (adjustable at the range from room temperature to 120℃)								
作业时间Working time		min	随物料特性而定45~90 (decided in accordance with the properties of raw materials)								
物料收得率Field		%	> 99								
噪声Noise		dB(A)	风机与主机隔离安装。噪声<75dB(A) (When installation, main machine is separated from fan, noise<75dB)								
主机外形尺寸Size (L×W×H)		m	1.0×0.6	1.2×0.7	1.25×0.9	1.6×1.1	1.85×1.4	2.2×1.65	2.34×1.7	2.8×2.0	3×2.25
			×2.1	×2.1	×2.5	×2.5	×3	×3.3	×3.8	×4.0	×4.4

FLP型流化造粒包衣机

FLP Fluid-bed Granulator Pelleter Coater

应用概述 General of Application

FLP系列多功能制粒包衣机是集喷雾干燥制粒-离心制丸-流化包衣干燥于一体的多功能设备。该机兼容多种工艺操作。特别适用于医药、食品、化工等行业多品种、多剂型制粒、制丸包衣。

FLP series multi-function granulator & coater is a multi-function equipment integrated spraying drying granulating-centrifugal pelleting-making-fluid coating drying in its one body .The machine combined various process operation.Particularly it is suitable for various varieties,various reagents granulating and pelletcoating in pharmaceutical industry,foodstuff industry,chemical industry,etc.



设备特点 Features of Equipment

粉体物料制粒及包衣

中成药流浸膏制粒几及包衣

能制备50um大小的微粒，并进行包衣

制备多孔性速溶颗粒，多层缓释近释包衣、球型制粒及

包衣制备致密球（丸）型颗粒及包衣

粉状、粒状、团状物料干燥

一机多能

Granulating and coating for powder material

Garnulating and coating for flow immersed paste of Chinese traditional medicinre

Can prepare and coat granule of 50um

Can prepare porous quick solving granule,multi-layer low releasing and control releasing coating,ball granule and coating

Can prepare compact ball(pellet)granule and coating.

Dry powder,granule and mass shape material.

One machine with multi-function

可选流化床体 Fluid-bed to be chosen available



顶喷制粒床

Top spray granulating



底喷包衣床

Bottom spray coating



旋流流化床

Turbojet granulating/coating

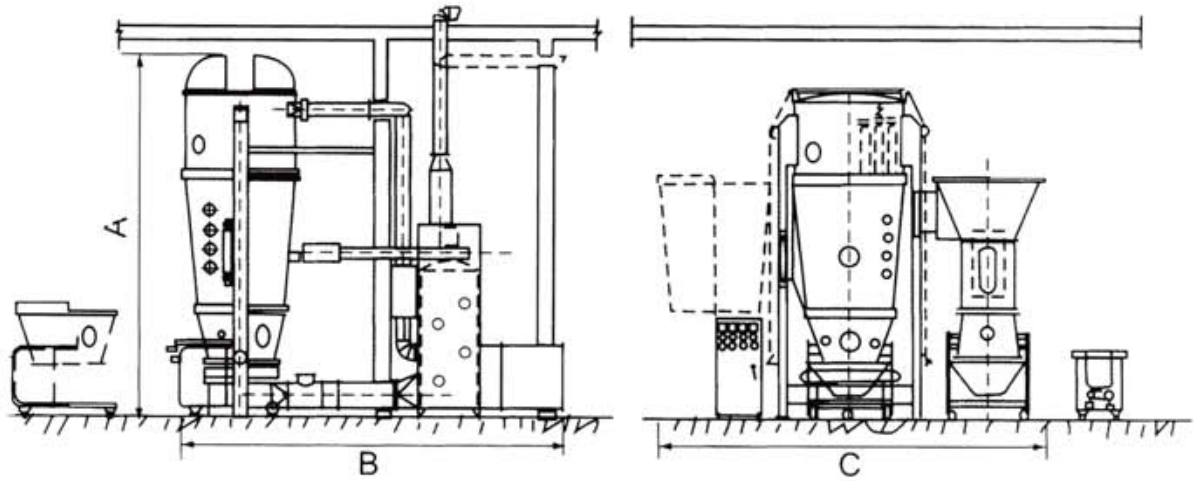


侧喷制丸包衣床

Centrifugal spray pelleting/coating

FLP型流化造粒包衣机
FLP Fluid-bed Granulator Pelleter Coater

技术参数 Technical Data



项目Item		机型Model/specification							
名称Name	单位 Unit	3	5	10	15	30	60	120	
容器直径Dia of container	mm	400	600	700	800	1000	1200	1500	
生产能力Productive capacity	kg/批准 kg/batch	0.75-3	1.2-5	2.5-10	3-15	7.5-30	15-60	30-120	
风机功率Power of fan	kw	3	4	5.5	7.5	7.5	11	18.5	
蒸汽	压强Pressure	Mpa 0.4-0.6							
Steam	耗量Consumption	电6kw	20	35	42	60	160	240	
压缩空气	压强Pressure	Mpa 0.6							
	耗量Consumption	0.3	0.4	0.6	0.6	0.9	1.1	1.5	
噪音Noise		dB 风机隔离处理不大于75分贝The noise at fan separated place should be less than 75dB.							
型号 Model	尺寸Size	A(mm)	B(mm)			C(mm)			
1		1.95	750			1100			
3		1.68	1100			580			
5		2200	1200			1800			
10		2500	1750			2150			
15		2800	1950			2700			
30		2850	2150			3000			
60		3300	2300			3600			
120		3500	2550			4200			

所有尺寸仅供参考，视物料情况，本厂拥有变更权利，并不另行通知。

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PGL-B型喷雾干燥制粒机

PGL-B Model Spray Drying Granulator

应用 Applications

制药工业：片剂、冲剂、胶囊剂颗粒；低糖、无糖的中成药颗粒。
 食品：可可、咖啡、奶粉、颗粒果汁、调味品等。
 其它行业：农药、饲料、化肥、颜料、染料等。

Pharmaceutical industry: tablet, capsule granule, granule of Chinese medicing with no or low sugar.

Foodstuff: cocoa, coffee, milk powder, juice of granule, flavoring and so on.

Other industries: pesticides, feed, chemical fertilizer, pigment, dyestuff and so on.

特点 Features

集喷雾干燥、流化制粒于一体，实现液态物料一步法制粒。

采用喷雾工艺，特别适用微辅料、热敏性物料，功效比FL沸腾制粒机高1-2倍。

产品终水份可达0.1%，配备返粉装置，成粒率≥95%，可制0.2-2mm颗粒。

改进设计的内混式多流体雾化器，可处理浸膏比重达1.3g/cm³
 Integrate spraying, drying, fluid granulating in one body and realize granulating in one step.

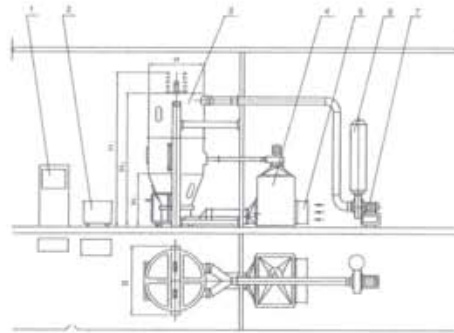
Adopting the process of spraying, it is particularly suitable for micro auxiliary raw materials and thermal sensitive raw materials. Its power is 1-2 times that than FL boiling granulating machine.

The final moisture of products can reach 0.1%. It is equipped with powder returning device. The rate of granule forming is more than 95%. 0.2-2mm of granule can be made.

The improved inner roller multi-flow atomizer in design can treat the liquid extract with 1.3g/cm³ of gravity.



安装示意图 Schematic of installation



- 1 控制柜 Control cabinet
- 2 输液小车 Liquid feeding carriage
- 3 主机 Main machine
- 4 换热柜 Heat exchange cabinet
- 5 空高效过滤器 Postfilter
- 6 消声器 silencer
- 7 引风机 Air blower

技术参数 Technical Parameters

项目 Item		单位 Unit	PGL-3B	PGL-5B	PGL-10B	PGL-20B	PGL-30B	PGL-80B	PGL-120B
流浸膏 Liquid extract	最小 Min	kg/h	2	4	5	10	20	40	55
	最大 Max	kg/h	4	6	15	30	40	100	140
沸腾能力 Fluidization capacity	最小 Min	kg/批	2	6	10	30	60	100	150
	最大 Max	kg/批	6	15	30	80	160	250	450
液体比重 Specific gravity of the liquid		kg/L	≤1.30						
原料容器量 Volume of material container		L	26	50	100	220	300	670	1000
容器直径 Diameter of container		mm	400	550	770	1000	1200	1400	1600
引风机功率 Power of fan		kw	4.0	5.5	7.5	15	18.5	22	30
辅风机功率 Power of auxiliary fan		kw	0.35	0.75	0.75	1.10	2.20	2.20	3
蒸汽 Steam	耗量 Consumption	kg/h	25	50	120	160	240	280	300
	压力 Pressure	Mpa	0.40-0.60						
电热型功率 Power of electric heating		kw	9	15	21	25.5	51.5	60	75
压缩空气 Compressed air	耗量 Consumption	m ³ /min	0.4	0.6	0.9	0.9	1.1	1.3	1.6
	压力 Pressure	Mpa	0.20-0.60						
作业温度 Operating temperature		°C	室温~130°C 自动调节 (automatically regulated from indoor temperature to 130°C)						
产品水份 Water content of product		%	≤ 0.5% (视具体物料而定)						
物料收得率 Rate of product collection		%	≥99%						
设备噪音 Noise level of machine		dB	≤70						
主机尺寸 Dim. of main machine	ø	mm	400	550	770	1000	1200	1400	1600
	H1	mm	940	1050	1070	1180	1620	1620	1690
	H2	mm	2100	2400	2680	3150	3630	4120	5050
	H3	mm	2450	2750	3020	3700	4100	4770	5800
	B	mm	740	890	1110	1420	1600	1820	2100

所有尺寸仅作参考，视物料情况，本公司拥有变更权利，恕不另行通知。

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原 理 Principle

本制粒机是我公司最新研制开发的新一代湿法混合制粒机。它在国内外现有制粒基础上大量采用了最新技术，GHL机结构合理，使用方便，功能完善，充分体现了设备与工艺的完美结合。粉体物料与粘合剂在圆筒形容器中由底部混合桨充分混合成湿润软材，然后由侧置的高速粉碎桨切割成均匀的湿颗粒。

This granulator is the new generation of wet method mixing granulator developed by our company. It adopts a mass of new technologies on basis of existing foundation.

It is reasonable in structure, easy to operate, functions consummate, sufficiently shows the perfect integration of equipment and process.

Powder material and adhesive is mixed into wet soft material by bottom mixing oar, and cut into even wet granules.



特 点 Features

本机采用卧式圆筒构造，结构合理。
 充气密封驱动轴，清洗时可切换成水。
 流态化造粒，成粒近似球形，流动性好。
 较传统工艺减少25%粘合剂，干燥时间缩短。
 每批次干混2分钟，造粒1-4分钟，工效比传统工艺提高4-5倍。
 在同一封闭容器内完成，干混-湿混-制粒，工艺缩减，符合GMP规范。
 整个操作具有严格的安全保护措施。



The machine adopts horizontal cylinder structure. Its structure is reasonable.
 Use air filled seal shaft to drive. When washing, it can be taken place with water.
 Use fluidization to granulate and the granule is near ball. Its flow is good.

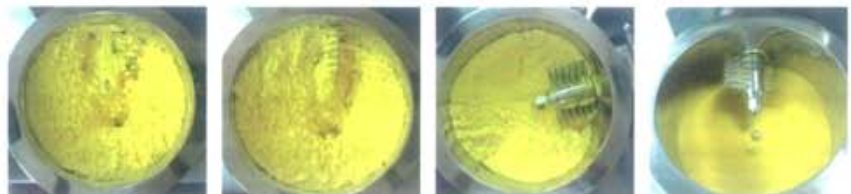
Compared with the traditional process, 25% of adhesive can be reduced and the drying time can be shortened.

The time of mixing in dry is 2 minutes and the time of granulating is 1-4 minutes. Compared with the traditional process, 4-5 times of efficiency is raised.

In the same sealed container, dry mixing, humidity mixing and granulating can be finished. It is in conformity with the requirements of GMP;

The whole operation has strict safe and protective measures.

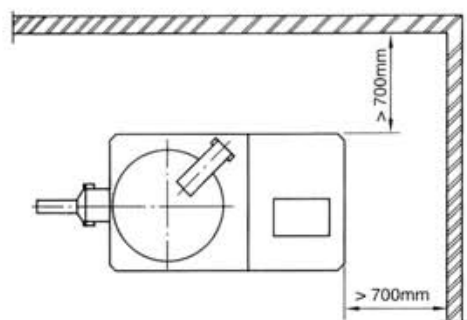
工艺流程 Flow chart



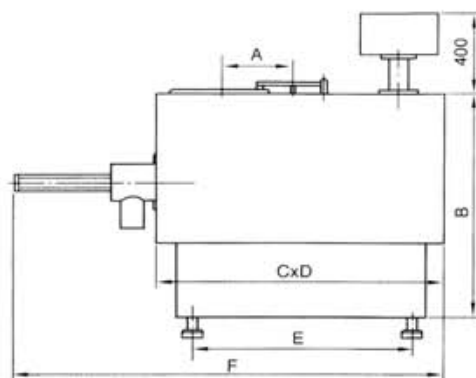
GHL型高速混合制粒机

GHL Model High Speed Mixing Granulator

平面布置图 Drawing of layout



外形尺寸 Overall dimensions



型号 Type	A	B	C × D	E	F
50	320	950	1250 × 800	970	1650
150	420	1000	1350 × 800	1050	1750
200	500	1100	1650 × 940	1450	2050
250	500	1160	1650 × 940	1400	2260
300	550	1200	1700 × 1000	1400	2310
400	670	1300	1860 × 1100	1550	2410
600	750	1500	2000 × 1230	1750	2610

技术参数 Technical parameters

名称 Name	型号 Type						
	50	150	200	250	300	400	600
容积 Capacity (L)	50	150	200	250	300	400	600
产量 Output (kg/batch)	15	50	80	100	130	200	280
混合速度 Mix speed (r.p.m)	200/400	180/270	180/270	180/270	140/220	106/155	80/120
混合功率 Mix power (kw)	4/5.5	6.5/8	9/11	9/11	13/16	18.5/22	22/30
切割速度 Cutting speed (r.p.m)	1500/3000	1500/3000	1500/3000	1500/3000	1500/3000	1500/3000	1500/3000
切割功率 Cutting power (kw)	1.3/1.8	2.4/3	4.5/5.5	4.5/5.5	4.5/5.5	6.5/8	9/11
压缩空气耗量 Compressed air consumption (m ³ /min)	0.6	0.9	0.9	0.9	1.1	1.5	1.8



应用领域 Scope of Application

医药：压片颗粒、胶囊填充颗粒等。
 食品：食品制造用颗粒，调味颗粒等。
 塑料：各种塑料成形颗粒。
 化工：催化剂、颜料、洗涤剂及其他化工原料等颗粒。
 Plastic industry:shaped granule of all kinds of plastic
 Chemical industry:granule of catalyst,pigment,detergent and other chemical raw materials.
 Pharmaceutical industry:granule for pressed disk,granule for filling capsule and so on
 Foodstuff industry:granule for foodstuff making,granule for flavoring

特点 Features

干粉颗粒密度均匀，溶解度好，成粒率高。
 特殊的送料结构，保证有效送料。
 轧辊水循环冷却，保证不会出现物料粘辊现象。
 不需要水或乙醇等润湿剂，不需要二次加热干燥，工序少，工效高，成本低。
 采用先进的电动液压，操作简单可靠，自动化程度高。
 密封操作无污染，满足药品卫生要求。
 特别适用于湿法无法解决的物料造粒。
 The density of dry power granule is homogeneous,Its solubility is good.The ratio of granule formed is high.
 Being adapted special mechanism to feed raw material to adhere roller can not be taken place.
 Because its roller is cooled through circle water,it guarantees the phenomenon of raw material to adhere roller can not be taken place.
 It is not necessary to use water or ethanol as humectant and to carry out the second heating and drying.Its procedure is less and its working efficiency is high and its cost is cheap.
 Being adapted advanced electric hydraulic pressure ,its operation is a simple and its automatic content is high
 Being adapted seal operation,no pollution,the quality of finished product can meet the requirement of health.
 Particularly it is suitable for granulating of raw materials that can not be granulated through damp method.



主要用途及特点

该机是直接粉料制成颗粒的新设备。该机结构新颖合理，性能稳定可靠，清洗维修方便。
 该机制成的颗粒可以压片剂，做冲剂，灌胶囊等。
 该机主要用于制药，食品、化工和其他行业造粒。
 特别适用于湿法无法解决的物料进行造粒。

Main Applications and its features

This machine is new equipment that can granulate form powder ti granule directly.Its features are novelty and reasonable in structure,stable and reliable in performance,convenient in cleanliness and maintenance.
 The granule manufactured with this machine can be used for pressing tablet,drinking granule,filling capsule etc.It is widely used for pharmaceutical industry,foodstuff industry and chemical industry to granulate.Particularly it is suitable for granulating of raw materials that can not be granulated through damp method.

技术参数 Technical Parameters

型号 Model	80型Model	120型Model
生产能力 Productive capacity	20-60	30-100
料斗容积 Volume of hopper(L)	3	5
压辊尺寸 Size if roller(mm)	200(D) × 80(W)	200(D) × 120(W)
轧辊最大预压力 Max pre-pressure of roller(t)	10	15
压辊转速 Revolution of roller(r.p.m)	(可调 adjustable)	(可调 adjustable)
送料速度 Revolution of fed raw material(r.p.m)	(可调 adjustable)	(可调 adjustable)
辊轮驱动电机 Motor of driving roller(kw)	4	7.5
送料驱动电机 Motor of fed raw material(kw)	1.5	2.2
造粒驱动电机 Motor of granulating(kw)	0.75	2.2
油泵驱动电机 Motor of oil pump(kw)		1.1
辊轮及送料速度调节型式 Adjusting way of roller wheel and fed speed	电磁调速electromagnetic speed control	

GZL型干粉制粒机

GZL Model Powder Rolling Machine



工作原理 Working Principle

粉状物料由振动给料斗经横向螺旋送料器定量，均匀地加入轧片主料斗，使轧片主料斗内保持恒定的料粒，然后由轧片主料斗内的纵向锥螺旋对粉料进行预压缩并输送到两只压辊的弧形槽口，两只压辊表面均匀分布形状相同的半扁圆形弧槽或菱形槽，通过一对齿轮的啮合传动，使两只压辊等速、反向旋转，将锥螺旋输送至槽口的物料咬入槽内并瞬间强制压缩，物料经压缩成形后随着压力逐渐减小，在其弹力及重力作用下，从槽内脱落，进入破碎整粒系统，然后根据用户的粒度要求过筛、分级，得到符合质量要求的均匀颗粒状产品，筛下粉重返回振动料斗循环利用。

Powder materials pass the vibrating material delivery bucket, after quantity fixed by cross spiral material conveyor. Evenly enter main rolling flake material bucket, so quantity of materials in material bucket keep constant. After powder materials are precompressed by the longitudinal cone spiral in the main flake bucket, they will be sent to inlets of two curve slots. Half oblate curve slots of rhomb slots or rhomb slots evenly separate on surface of two rollers. By way of engaging and transmission of a couple of gears, two rollers revolving opposite direction with one speed. So materials are bitten into the slots and forced to be compressed in a twinkling. After materials being compressed and formed, the pressure on them gradually reduce. Materials drop by elasticity and gravity from the slots, enter the Broken Granulating System. Then they are screened and graded according to consumer's require of particle size. Finally you get regular particle product conforming to quality standard. Rest of screened powder can return to vibrating bucket to be used again.

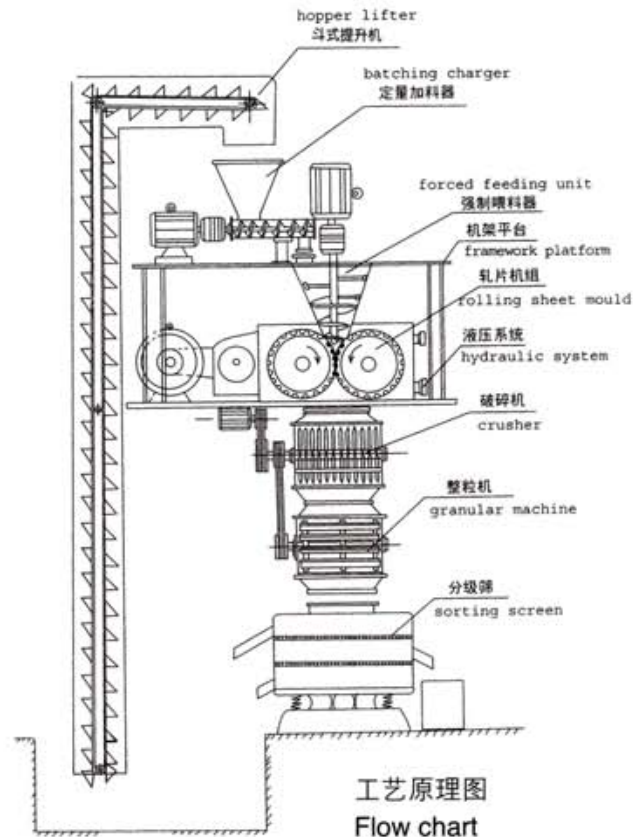
应用范围 Application

二氯异氰尿酸钠	Dichloroisocyanuric acid	漂粉精	Calcium hypochlorite
三氯异氰尿酸钠	Trichloroisocyanuric acid	碳酸锶	Strontium carbonate
氧化铅	Lead(II) oxide	冰晶石	Sodium hexafluoroaluminate
氰尿酸	Cyanuric acid anhydrous	吡虫啉	Admire
硝酸钾	Potassium nitrate	磷酸二氢钙	Calcium phosphate
硫酸钾	Potassium sulfate		

概述 Descriptions

GZL系列干粉制粒机是我公司根据用户需要，在吸收国外先进粉体造粒技术的基础上精心研制开发的新型制粒设备，该设备能够将粉体原材料直接制成满足用户要求的颗粒状产品，期间无需添加任何中间体及添加剂，造粒后的产品粒度均匀，堆积密度显著提高，同时，可有效控制污染，减少粉料浪费。该机设计科学，结构紧凑，工艺过程简单，操作使用方便，是您粉体产品造粒的理想选择。

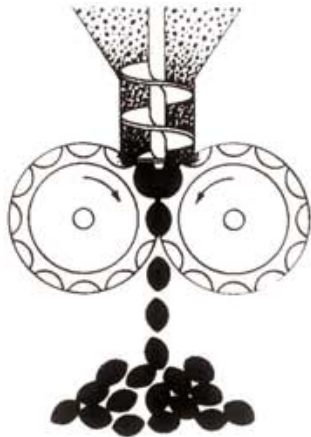
GZL series dry-power pelletizer is a newly-designed pelletizing machine developed and manufactured by our company in accordance with the needs of customers and on the basis of absorbing foreign advanced technology. This kind of equipment can make the powder material become the granular solid. During the process, no additive and mediate are added. After pelletizing, the grain size is even and bulk density increases. Meanwhile, it can control the pollution efficiently, reduce the waste of power material. The design of it is scientific, structure is compact, technological process is simple and operation is easy. It is an ideal for you to choose a pelletizing machine.



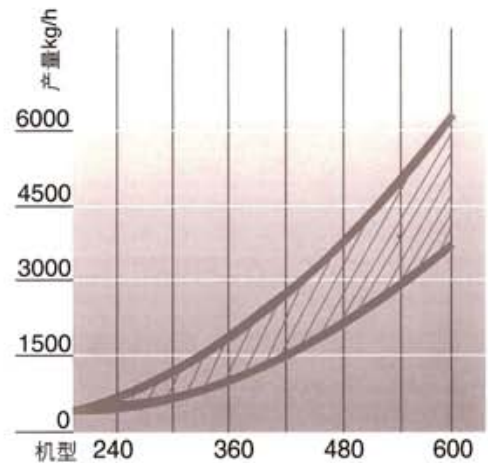
特点 Features

无需任何添加剂，干粉直接制粒。
颗粒强度可以调整，通过调节压辊的压力，控制成品强度。
循环操作，实现连续生产。
成品产量高，单机产量可达2000kg/h以上。(堆积密度 $1.5 \times 10^3 \text{kg/m}^3$)

Without any additive, dry powder directly be made to particles.
Particle intensity can be adjusted. Regulate the pressure of rollers to control intensity of product.
Operating in cycles, working continuously.
High product output, output of one machine can be than 2000kg/h. (Stocking Intensity $1.5 \times 10^3 \text{kg/m}^3$)



在压块时，粒状物料在两个反向旋转的辊子之间被压实，压块可使用粘剂。



技术参数 Technical parameters

参数Parameter	型号Type	GZL240	GZL360	GZL480	GZL600
项目Item					
轧辊直径 Roller diameter(mm)		ø240	ø360	ø480	ø600
有效使用宽度 Width for use (mm)		80	120-150	140-200	180-250
轧辊转速 Roller revolving speed(rpm)		15-32	14-30	10-25	10-25
最大成形压力 (Mpa) Maximum thickness of rolling		12	16	21	30
最大厚度 (mm) Maximum thickness of rolling flake		6	8	10	10
轧片产量 Output of rolling flake(kg/h)		50-300	200-1500	450-3000	1000-6000
成品粒度 Finished product granule(mm)		0.5-6	0.5-6	0.5-6	0.5-6
成品产量 Finished product output(kg/h)		30-180	120-800	280-1800	600-3000
主机功率 Power of main engine(kw)		11	30	45	75
装机总容量 Total machine capacity(kw)		20	50	80	165
外形尺寸 Exterior dimension(mm ³)		1500 × 1500 × 2800	2000 × 2000 × 4600	2500 × 2500 × 5000	2400 × 3350 × 6300
设备总重量 Total weight of equipment(t)		7	10	15	29



JZL挤压造粒机

JZL Series Extruding Granulating Machine

特点 Features

本机用于制药、食品、冲剂、化工、固体饮料等行业，将搅拌好的物料制成所需颗粒，特别适用对粘性较高的物料。

The machine is mainly suitable for pharmaceutical industry, chemical industry, solid drink industry and so on, It can make the stirred raw material granulate the needed granule, Especially, it is suitable for raw materials that have sticky a lhesive.



干燥前
Before drying



干燥后
After drying

特征 Character

本机凡参与物料接触部分均采用不锈钢制造，外型美观，结构合理，制粒成型率高，颗粒美观，自动出料，避免人工出料造成颗粒破损，并适合流水作业。

All parts contacted with raw material in this machine are made of stainless steel. Its appearance is beautiful and taste and its structure is reasonable, its efficiency is high and the granule is beautiful. Its discharge is automatic. Therefore it can avoid the damaged condition caused manual. It is suitable for in line production too.

技术参数 Technical Parameters

碾刀尺寸	Size of milling knife(mm)	250	300
粒子直径	Diameter of granule(mm)	φ2-2.2可根据用户需要 It may be in accordance with the requirements of customers)	φ1.2-3可根据用户需要 It may be in accordance with the requirements of customers)
外型尺寸	Overall dimesions(mm)	700 × 540 × 1300	880 × 640 × 1300
电机功率	Power of motor(kw)	3	4
重量	Weight(kg)	350	400
生产能力	Production capacity(kg/h)	100-200	140-400

工作原理 Working Principle

工作原理：SE系列螺杆挤出造粒机分单螺杆 (SES)和双螺杆(SET)型，挤出形式有前出料和侧出料两种。经混合、捏和的湿物料或低软化点（一般指小于50℃）物料在螺杆输送、挤压作用下，从机头开孔模板挤出，再经过干燥或冷却得到颗粒成品，从而实现将粉状产品改变为均匀的颗粒产品的目的。颗粒形状为圆柱状，成品颗粒直径可由模板开孔孔径调节和控制：侧出料为0.7-2.0mm，前出料为1.5-12mm，成粒率≥95%。

SE series of screw type extruding pelleter include single-screw type and double-screw-type. Two models of front and side for material to be extruded out. Wet material or material with low melting point (general means < 50℃) after being kneaded and mixed shall be extruded out from mould plate at the head of the plant due to being conveyed and pressed by screws, and then be dried or cooled to form end products of particles so as to complete the course of changing material from powder to particle. The shape of grain is cylindrical. The diameter of end grain can be chosen and controlled by means of changing the diameter of holes in the mould plate: for side type is 0.7-2.0mm, for front type is 1.5-12mm. The rate of end product is equal to or more than 95%.



应用范围 Applied Scope

广泛适用于橡胶助剂、食品添加剂、塑料助剂、催化剂、农药、染料、颜料、日化、制药等行业需造粒的产品。

The plant is widely applied to material needs granulating such as rubber auxiliari, food additive, plastic auxiliary, catalyzer, agrochemicals, dye, pigment, daily chemicals, medicine etc.

主要优点 Main Merits

由于粉状物料在湿态下完成造粒过程，使得造粒及其后续过程（如干燥、包装等）的操作条件得到大大改善。一般可减少现场粉尘飞扬90%以上。

通过造粒，可避免粉体产品易出现的结块、架桥、脉动等影响使用的现象，同时避免了使用过程粉料带来的二次污染，使产品的物理性能得到较大改善。

一般情况下，造粒产品的堆积比重都有较大的提高，因此可节约运输、储存、包装空间。

对多组份复合、混配的产品而言，造粒可避免各组份偏析，从而真正保证复合产品质量。

As the powder material is kept in wet state during the whole process of granulation, The working condition is greatly promoted. Flying of dust is generally reduced to over 90% of that used to be.

Some phenomenon that well influent application such as curdling, framing, pulsing etc can be averted by means of granulation.

As the stacking specific gravity can be increased generally, space for transporting, storing, packing can be effectively saved.

As for products composed of multi-component or mixed distributed, the segregation of each component can be avoided though granulation so as to guarantee the quality of compound products.

规格型号 Main Technical Parameters

SET 双螺杆挤出造粒机 SET Double-screw extruding pelleter			SES 单螺杆挤出造粒机 SES Single-screw extruding pelleter		
型号	螺杆直径 (mm)	传动功率 (kw)	型号	螺杆直径 (mm)	传动功率 (kw)
SET-60	ø60	3.7	SES-80	ø80	7.5
SET-100	ø100	7.5	SES-120	ø120	15
SET-140	ø140	15	SES-160	ø160	22
SET-180	ø180	30	SES-200	ø200	37

QZL型球形抛丸机

QZL Pelletizer

应用概述 General of Applications

本系统是通过将粉体物料与粘合剂混合，制成适宜的软材，再将软材挤压成柱状颗粒后放入球形抛丸机制成圆球度极高的球形颗粒，最后用干燥设备干燥掉多余水份，取得所需要的球形颗粒。

系统组成：混合+初步制粒+整圆+干燥+筛分=成品

混合：CH槽形混合机或其它混合机（混合类）；制粒：ZL旋转挤压式颗粒机或YK摇摆式颗粒机（制粒类）；整圆：QZL圆形整粒机；干燥：GFG高效沸腾干燥机、FG沸腾干燥机、烘箱或其它；筛分：ZS振动筛或其它。

各机种见下面所述

This system makes proper moisture damp material by mixing powder and binder, then presses the damp material into column-shape granule and put them into high degree ball-shape granule in pelletizer. At last remove the water by drying equipment and the ball-shape granule can be obtained.

System buildup: mixing + accidence granulating + pelleting + drying + sieving = product

Mixing: CH Slot mixer or others, Granulating: GHL high speed granulator, JZL extruder granulator or YK granulator; pelleting: QZL pelletizer; Drying: GFG fluid bed dryer or others; Sieving: ZS sieve.

QZL型圆形整粒机 QZL pelletizer

将前道工序做成的湿颗粒投入旋转离心盘内，使湿颗粒受到环隙空气浮力、旋转离心力、自身重力作用，呈环形绳股状运动，从合理方向通过多流体喷枪向运动料层喷入配方液，从而形成圆球度很高的球丸，原理与旋转流化床类似。

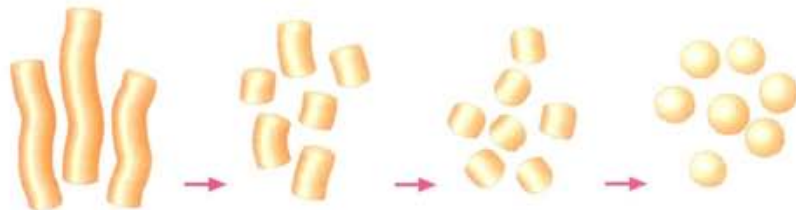
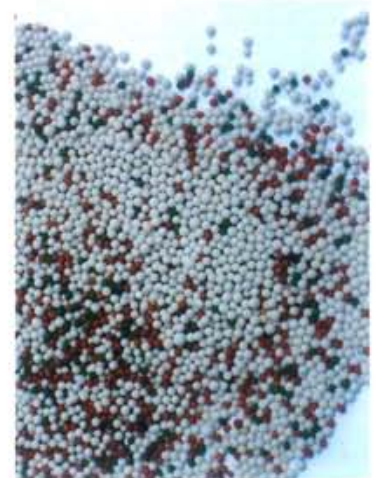
典型应用：奥美拉唑制丸、阿斯匹林制丸、饲料酶制丸、硫酸钠制丸、复方氨酚烷制丸、催化剂、复合VB₂薄膜制丸。

设备特点：

- *鼓风机可先配电机变频，整粒更快，成品更美观
- *旋转盘采用双速电机，使产品最大化美观
- *物料在密闭容器内操作，无粉尘飞扬，操作安全

This machine makes damp granule into beautiful pellet by setting rotating centrifugal disk, blower, and pneumatic nozzle. Feed damp granule into rotating centrifugal disk, start fan then start rotating centrifugal disk. It can make the damp granule in float and circle by the air from gap, rotating centrifugal strength and itself gravity, appear circle rope-turning movement and become high-degree ball shape pellet.

- * Blower controlled by inverter, pelleting fast and product beautiful
- * Rotor dish use double speed motor, made the product nice.
- * Material moved in the airtight container, with no dust out, working safety.



技术参数 Technical Parameters

型 号 Specifications	230	400	500	700	1000
功 率 Power (KW)	0.75	2.2	3	3.7	5.5
生产能力 Capacity (kg/h)	2.5-4	5-8	8-16	40-80	120-200



主要用途及特点 Main Applications and Its Features

本机是一种将潮湿粉末混合物，在旋转滚筒的正、反旋转作用下，强制性通过筛网而制成颗粒的专用设备。C型为加重型适合粘度大的物料制成颗粒。

该机主要适用于医药、化工、食品等工业中制造各种规格的颗粒，烘干后供压制各种成型制品，该机亦可用于粉碎凝结成块状的干料。

物料接触处均采用不锈钢材料制作，外型美观大方，清洗方便操作简单，能耗低等优点。

This machine is special equipment .Under the action of clockwise and counter-clockwise rotation of rooler,damp powder mixture will be forced to pass through sieve and then become granule,Model C is a heavy type and suitable for raw materials having sticky viscosity.

This machine is mainly suitable for pharmaceutical industry,chemical industry and foodstuff industry to make granule with different specifications.After it is dried through backing,then press it to form all kinds of shaped products.It can also be used for dry block raw material that is crushed and coagulated.

All parts in this machine are made of stainless steel.Its appearance is beautiful.Its cleaning is very convenient.Its operation is very simple.Its energy consumption is very low.



技术参数 Technical Parameters

型号 Model	A型、B型 Model, B	C型（加重型） Model C(heavy type)
生产能力 Productive capacity(kg/h)	100-200	150-300
电机功率 Power of motor(kw)	2.2	3
滚筒转速 Revolution of roller(r/min)	65	65
摇摆角度 Swing angle	360°	360°
滚筒直径 Diameter of roller(mm)	ø160	ø160
重量 Weight(kg)	约300 Approximate 300	450
外形尺寸 Overall dimensions(mm)	1150 × 680 × 1150	1260 × 750 × 1150

注：表中产量因物料不同，出料粒度及湿、干品不同而存在差异，仅供参考。A型为物料经过不锈钢，B、C型则为全不锈钢制作。

KZL系列快速整粒（粉碎）机
KZL Series High-Speed Grinding Granulator

主要用途 Main Applications

本机适用于中西药、食品、化工颜料及饲料等行业中颗粒的破碎及整理。

经各种造粒工艺及设备所得到的颗粒形状及规格各异，将造粒后的颗粒经本机高速旋转的刀片组合切割后，经网板排出，便可得到形状及规格基本一致的颗粒。

本机全部零件均采用不锈钢制造，表面抛光，装拆与清洗十分方便。

This machine is suitable for crushing and processing granule of chinese traditional medicine,Western medicine,foodstuff,chemicals,pigments,feedstuff and so on,

The specifications and shapes of granule made by all kinds of granulating process and different granulator are different,The granule with basic similar shape and specification can be gotten when the granulated granule is cut by knives with high speed in this machine.

All parts in this machine are made of stainless steel.Its surface is polished.Its assembling and disassembling and cleaning are very convenient.



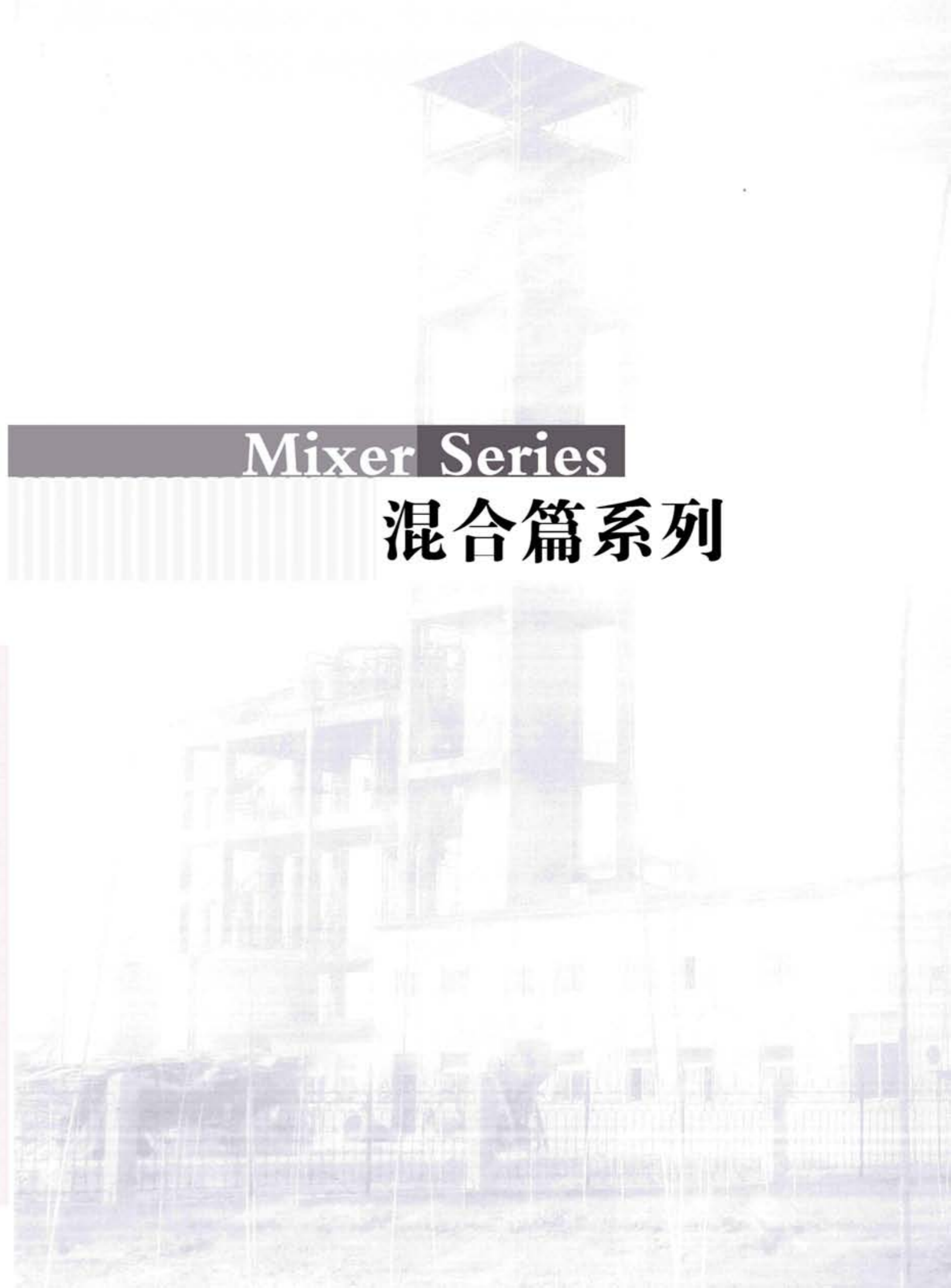
技术参数 Main Technical Parameters

型号 Type	100	180	300
定子直径 State diamater (mm)	ø100	ø180	ø300
定子长度 State length (mm)	96	179	305
生产能力 Productive capacity (kg/h)	20-150	100-1500	200-2500
功率 Power (kw)	0.75	1.5	5.5
转速 Speed (rpm)	180-1400	175-1400	200-1400



Mixer Series

混合篇系列



SYH系列三维运动混合机

SHY Series Three Dimensional Mixer

用途 Applications

该机广泛应用于制药、化工、食品、冶金、轻工及科研单位，能非常均匀地混合流动性较好的粉状的物料，使混合后的物料能达到最佳混合状态。

This machine is suitable for many industries such as pharmaceutical industry,met-allurgy 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.

特点 Features

由于混合桶体具有多方向的运动，使桶体内的物料交叉混合点多，混合效果高，均匀度可达到99.9%以上最大装载系数可达0.9（普通混合机为0.4-0.6），混合时间短，效率高。

该机混合桶体设计独特，桶体内壁经过精细抛光，无死角，不污染物料，出料方便，清洗容易操作简单等特点。

Because the mixing drum has multi directional motion,it makes raw material inside the drum have many cross-mixing points,therefore 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 is0.4-0.6).Its mixing time is short and its efficiency is high.

The design of mixing time is short and 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 cleaing and so on.

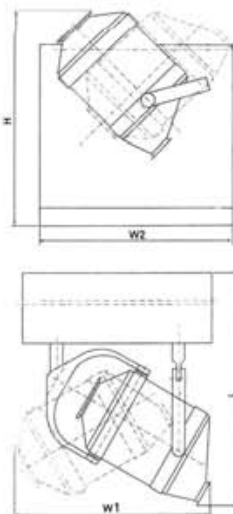
工作原理 Principle of Work

该机在运行中，由于混合桶体具有多方向转动动作，使各种物料在混合过程中，加速了流动和扩散作用，同时避免了一般混合机因离心力作用所产生的物料比重偏析和积聚现象，混合无死角，能有效确保混合物料的最佳品质。

结构：该机由机座、传动系统、电器控制系统、多向运动机构、混合桶等部件组成，与物料直接接触的混合桶采用不锈钢材料制造，桶体内外壁均经抛光。

During the period of operation, because the mixing drum has multi-directional 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.



技术参数 Technical Parameters

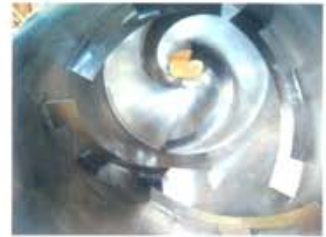
型号 Model	SYH-5	SYH-15	SYH-50	SYH-100	SYH-200	SYH-400	SYH-600	SYH-800	SYH-1000	SYH-1200	SYH-1500	
混合桶容积 Volume of mixing drum(L)	5	15	50	100	200	400	600	800	1000	1200	1500	
最大装载容积 Max loading volume(L)	4	12	40	80	160	320	480	640	800	960	1200	
最大装载重量 Max loading weight(kg)	2.5	7.5	25	50	100	200	300	400	500	600	750	
主轴转速 Revolution of main shaft(r/min)	0-28			0-8								
电机功率 Power of motor(kw)	0.25	0.37	1.1	1.5	2.2	4	5.5	7.5	7.5	11	11	
外形尺寸 Overall dimensions(mm)	L(mm)	700	750	1400	1700	1800	2100	2400	2600	2650	2950	3100
	W1(mm)	650	1000	1000	1200	1400	1800	2200	2380	2500	2650	2850
	H(mm)	450	700	1200	1500	1600	1950	2350	2500	2600	2750	3000
	W2(mm)	550	650	850	1250	1350	1650	1750	2000	2100	2200	2250
重量Weight(kg)	150	200	300	500	800	1200	1500	2000	2500	3000	3500	



原理 Principle

二维混料机主要由转筒、摆动架、机架三大部分构成。转筒装在摆动架上，由四个滚轮支撑并由两个挡轮对其进行轴向定位。在四个支撑滚轮中，其中两个传动轮由转动动力系统拖动使转筒产生转动；摆动架由一组曲柄摆杆机构来驱动，曲柄摆杆机构装在机架上，摆动架由轴承组件支撑在机架上。

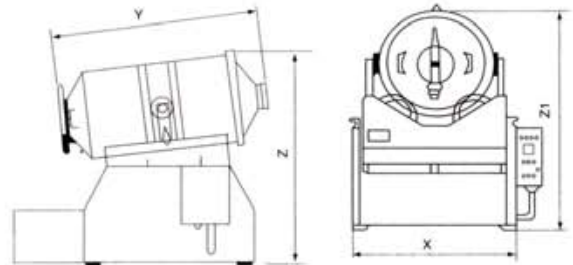
EYH Series Two Dimensional Mixer Principle Two dimensional mixer mainly consists of three big parts namely, rotating cylinder, swinging rack and frame. The rotating cylinder lies on the swinging rack, supported by four wheels and its axial fixation is done by two stop wheels. Two of four wheels are driven by rotating power system to made the cylinder rotate. The swinging rack is driven by a set of crankshaft swinging bar which is mounted on the frame and the swinging rack is supported on the frame.



特点 Features

EYH 二维混料机的转筒可同时进行二个运动，一个为转筒的自转，另一个为转筒随摆动架的摆动。被混和物料在转筒内随转筒转动、翻转、混和的同时，又随转筒的摆动而发生左右来回的掺混运动，在这两个运动的共同作用下，物料在短时间内得到充分的混和。EYH二维混料机适合所有粉、粒状物料的混和。

The rotating cylinder of EYH Two Dimensional Mixer can make two motions at the same time. One is the rotation of the cylinder and the other is swinging of the cylinder along the swinging rack. Materials to be mixed will be mixed from left to right and vice versa when the cylinder is swinging. As a result of these two motions, materials can be mixed fully in a short time. EYH Two Dimensional Mixer is suitable for mixing of all powder and granule materials.



技术参数 Technical Parameters

型号 Model	料筒容积 Barrel volume(L)	装料容积 Loading capacity	最大装料量 Max Loading weight(kg/批)	摆动、转动次数 No. of swing & rotation(r/min)	电机总功率 Total motor power (kw)	外型尺寸 Overall dimensions X × Y × Z × Z ₁ (mm)	总重量 Total Weight (kg)	料筒重量 Barrel weight (kg)
EYH-60	60	36	18	50	0.4	700 × 730 × 1100 × 990	115	15
EYH-150	150	90	45	37	1.15	800 × 1050 × 1450 × 1340	190	50
EYH-300	300	180	90	30	1.15	900 × 1050 × 1450 × 1340	340	60
EYH-600	600	360	180	23.6	3	1170 × 1640 × 2050 × 1910	1150	140
EYH-800	800	480	240	19.8	3	1320 × 1950 × 2150 × 2000	1600	200
EYH-1000	1000	600	300	19.8	3	1300 × 2980 × 1894 × 1766	1700	240
EYH-1500	1500	900	450	16.2	4.4	1500 × 3195 × 2150 × 2008	2000	320
EYH-2000	2000	1200	600	16.2	7.4	1660 × 3305 × 2255 × 2120	2600	430
EYH-3000	3000	1800	900	13.8	11	1860 × 3860 × 2570 × 2420	3500	620
EYH-4000	4000	2400	1200	12.8	13	2010 × 4100 × 2755 × 2550	4100	700
EYH-6000	6000	3600	1800	11.2	18.5	2280 × 4965 × 3172 × 2935	6100	1100
EYH-8000	8000	4800	2400	10.4	22	2500 × 5200 × 3655 × 3200	7900	1450
EYH-10000	10000	6000	3000	9	30	2600 × 5500 × 3750 × 3400	1500	1650
EYH-12000	12000	7200	3600	7	30	3050 × 4850 × 4460 × 4090	10000	1800
EYH-15000	15000	9000	4500	6	50	3100 × 5600 × 4700 × 4200	11000	2000
EYH-20000	20000	12000	6000	6	60	3600 × 6100 × 5000 × 4500	12000	25000

VH系列V型高效混合机

Model VH High Effective Mixer

概述

该机广泛应用于制药、化工食品等行业两种以上干粉状、颗粒状物料的混合。

该机混合和结构独特，混合效率高，无死角，采用不锈钢材料制作，内外壁抛光处理，外形美观，混合均匀，适用面宽，并能根据用户的要求配套强制搅拌器，以适合较细的粉粒、块状、含有一定水份的物料混合之用。

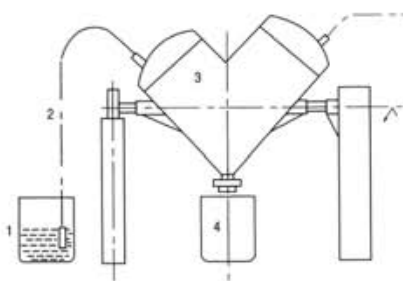
General Descriptions

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 mixing 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.



结构示意图 Sketch of structure



- 1.物料筒 Cylinder of raw
- 2.吸料管 Cylinder of sucked raw material
- 3.混合机 Mixer
- 4.出料 Cylinder of discharged raw material
- 5.真空表 Vacuum meter
- 6.气体净化罐 Tank of air purification
- 7.真空泵 Vacuum pump
- 8.电动机 Motor

技术参数 Technical Parameters

型号规格 Model and specification	VH-0.18	VH-0.3	VH-0.5	VH-1.0	VH-1.5	VH-2.0	VH-2.5	VH-3.0	VH-4.0	VH-5.0	VH-6.0
生产能力 Productive capacity(kg / batch)	72	120	200	400	600	800	1000	1200	1600	2000	2400
配用真空泵型号 Model of raw material fed in (min)	W2	W2	W2	W3	W3	W3	W3	W4	W4	W4	W4
进料时间 Time of raw mater fed in(min)	3-5	3-5	4-6	6-9	6-10	6-13	8-15	8-12	10-15	15-20	18-25
混合时间 Mixing time(min)	4-8	6-10	6-10	6-10	6-10	6-10	8-10	8-12	8-12	8-12	8-12
全容积 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
搅拌转速 Stirring speed(r/min)	12	12	12	12	12	12	12	10	10	10	10
电机功率 Power of motor(kw)	1.1	1.1	2.2	4	4	5.5	7.5	11	11	15	18.5
回转高度 Rotating height(mm)	1580	1760	2400	2840	3010	3240	3680	3700	4350	4800	5300
重量 Weight(kg)	280	320	550	950	1020	1600	2040	2300	2800	3250	3850

备注：装载系数，均匀0.4-0.6.该表中的生产能力均安装载系数0.5，物料密度0.8计算。

Notes:all loading coefficient is 0.4-0.6 the productive capacity listed in the table is calculated in accordance with 0.5 of loading coefficine and 0.8 of raw material density.

VI型强制型搅拌系列混合机 Model VI Forced Stirring Mixer

概述

本厂引进吸收消化国外新技术，研制了VI型强制搅拌混合机。该机对较细的粉粒，凝块后或两种以上的粉状体，含有一定水份的物料均能混合。如对微量物相和的添加物也可达到混合效果（指添加量很少的配料混和）。

General Descriptions

Our factory researched and manufactured Model VI forced stirring mixer on the basis of absorbing abroad high technology.

This machine can mix fine powder, caked or more two powder raw materials, raw material containing certain moisture. Particularly it can also mix raw material that needs to add small amount of additive and satisfied effect can be gotten too.



技术参数 Technical Parameters

型式 Model	生产能力 Productive capacity (kg/time)	全容积 Total volume (m3)	混合时间 Mixing time (min)	功率 Power (kw)	筒体转速 Revolution of cylinder (r/min)	搅拌转速 Stirring speed (r/min)	外形尺寸 Overall dimensions (mm)	重量 Weight (kg)
VL-180	60	0.18	2-5	1.1×2.2	12	300	1730×700×1580	320
VL-300	80	0.3	4-10	1.1×2.2	12	300	1730×700×1580	360
VL-500	130	0.5	1-10	1.1×2.2	12	300	2660×1250×2400	600
VL-1000	240	1	6-10	3×2.2	12	300	3220×1500×2840	1000

SZH系列双锥混合机 SZH Series Doubletapered Mixer

应用 Applications

本机适用于医药、化工、食品、建材等行业的粉状、粒状物料的混合。
It is suitable for mixing the powder and state materials in the pharmacy, chemical food, building material and other industries.

特点 Features

本机将粉末或粒状物料通过真空输送或人工加料到双锥容器中，随着容量的不断旋转，物料在容器中进行复杂的撞击运动，达到均匀的混合。

本机节约能源、操作方便、劳动强度低，工作效率较高。

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.

技术参数 Technical Parameters

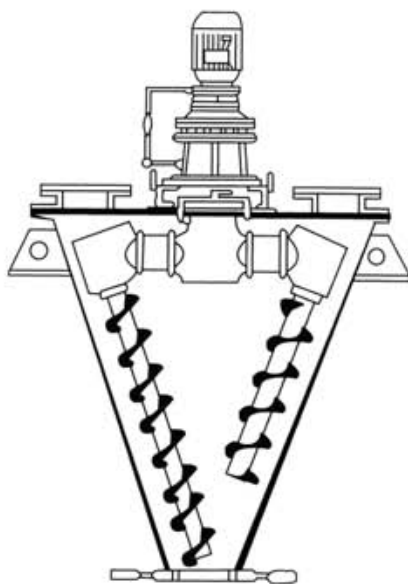
型号Model	180	300	500	1000	1500	2000	2500	3000	4000
全容积 Total volume(L)	180	300	500	1000	1500	2000	2500	3000	4000
生产能力 Productive capacity(kg/批)	40	60	100	200	300	400	500	600	800
混合时间Mixing time(min)	4-8	6-10	6-10	6-10	6-10	6-10	6-10	6-10	6-10
筒体转速Revolution of cylinder(rpm)	12	12	12	12	12	12	8	8	8
功率Power(kw)	1.1	1.1	2.2	4	4	7.5	7.5	7.5	11
外形尺寸 Power(mm)	1400×800 ×1850	1685×800 ×1850	1910×800 ×1940	2765×1500 ×2370	2960×1500 ×2480	1400×800 ×3500	1400×800 ×3560	1400×800 ×3600	1400×800 ×3680
回转总高度Rotation Height(mm)	1850	1850	1950	2460	2540	3590	3650	3700	3730
重量Weight(kg)	280	310	550	810	980	4500	2150	2500	3200



DSH系列双螺杆锥形混合机

DSH Series Double Screws Cazone Mixer

示意图 Sketch



主要用途及特点

本机是一种新型、高效、高精度的混合设备，广泛适用于制药、化工、饲料等行业的各种粉粒体物料的混合。

该机自转公转由一套电机及摆线针轮减速机来完成，采用两螺杆非对称搅拌，使物料搅拌范围大，混合更均匀，混合速度快，对比重悬殊，混配比较大的物料混合更为合适，本机凡与物料接触部分均为不锈钢制造。

Main Applications and its Features

The machine is a new style mixing equipment with high efficiency and accuracy. It is wide suitable for pharmaceutical industry, chemical industry, feed stuff industry to mix all kinds of raw materials.

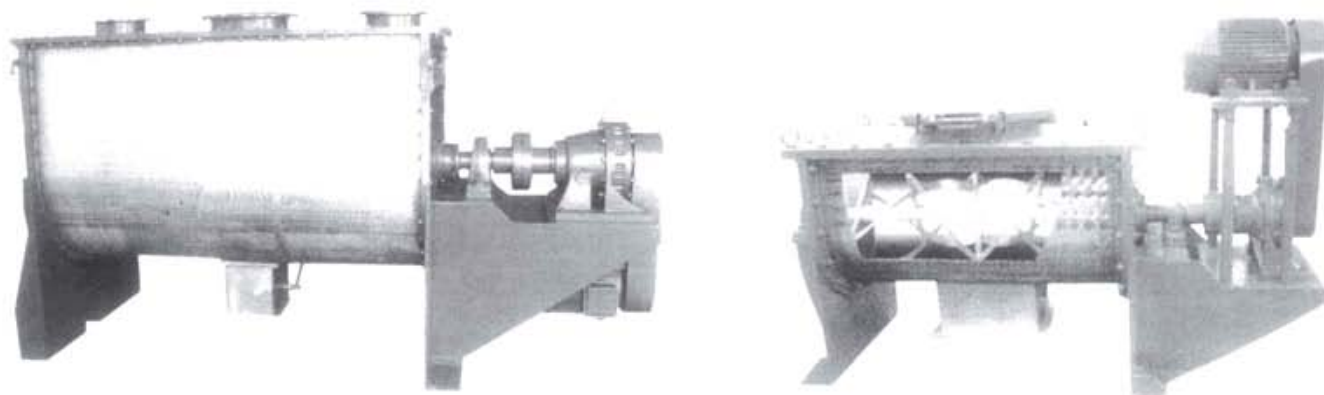
The rotation and revolution of machine is finished through a set of motor and cyc-loidal needle wheel reducer. Being adapted two screws to carry out stirring asymmerrically, it makes the stirring scope of raw material is wide and the mixing is uniform better and quickly. Particularly it is suitable for raw materials having large difference in specific gravity and large ratio of formulation. All parts that can be contacted with raw material in this machine are made of stainless steel.

技术参数 Technical Parameters

型式 Model	生产能力 Productive capacity (kg/time)	全容积 Total volume (m ³)	装载系数 Loading coefficient	疏松密度 Powder Bulk density	物料粒数 (目) Revolution of cylinder (r/min)	电机功率 Power of motor (kw)	混合时间 Mixing time (min)	外形尺寸 Overall dimensions (mm)	重量 Weight (kg)
DSH-0.2	95	0.2	0.6	-0.8	20-250	2.2	6-10	890 × 1850	600
DSH-0.5	190	0.5	0.6	-0.8	20-250	3	6-10	1160 × 2250	800
DSH-1	380	1	0.6	-0.8	20-250	4	8-10	1450 × 2700	1200
DSH-2	720	2	0.6	-0.8	20-250	5.5	8-10	1850 × 3450	1800
DSH-4	1400	4	0.6	-0.8	20-250	11	8-10	2260 × 4210	2500
DSH-5	2400	5	0.6	-0.8	20-250	11	8-10	2578 × 4566	3400
DSH-6	2880	6	0.6	-0.8	20-250	18.5	8-10	2710 × 4782	3550
DSH-8	3840	8	0.6	-0.8	20-250	18.5	8-10	2950 × 5392	3700
DSH-10	4800	10	0.6	-0.8	20-250	22	8-10	3168 × 5735	3950

WLDH卧式螺带混合机

Model WLDH Series Horizontal Ribbon Mixer



特点 Features

装卸系数大，设备占地面积小；

Big coefficient of loading, small occupied area;

混合粘性或具有凝聚性的物料时，清洗困难。

The raw materials which have mixed viscosity and cohesion are difficult to clean.

工作原理 Principle of work

该机型由容器，螺旋搅拌叶片和传动部件组成；螺旋叶片一般做成双层或三层，外层螺旋将物料从两侧向中央汇集，内层螺旋将物料从中央两侧输送，形成对流混合。

This machine is composed of container, screw stirring paddles and transitional parts; the screw paddle are generally made into 1 layer or 3 layers, the outer screw conveys the material to the centre from two sides, and the inner layer of screw conveys the material to the two sides from the centre, so as to form convection mixing, the cage can be made into roundness, so the jacket can be played in reaction and drying.

应用范围 Application

螺带混合机一般用于粘性或有凝聚性的粉粒体的混合及粉粒体中添加液体及糊状物料的混合，同时由于粘性物料清洗困难的特点，适用于产量大、不经常更换品种的场所混合。

The ribbon mixer is generally used in the mixing of viscous or adhesive powder material, or the mixing of powder which needs to add liquid, and paste material. Meanwhile, because it is difficult to clean viscous material, the machine is suitable for the mixing case, where the output is large and there is no need of displacing material variety frequently.

技术参数 Technical Parameters

型号规格 (m ³) Model & specs	WLDH-0.1	WLDH-0.3	WLDH-0.5	WLDH-1	WLDH-1.5	WLDH-2	WLDH-3	WLDH-4	WLDH-6	WLDH-8	WLDH-9
一次混合(kg) Mixed amount/batch(kg)	30-50	100-150	200-300	400-600	600-900	800-1200	1200-1800	1600-2400	2400-3600	3200-4800	4000-6000
装机功率 (kw) Equipped power(kw)	1.5-4	3-5.5	4-11	7.5-15	11-18.5	15-22	18.5-30	22-37	37-55	37-55	45-75
设备重量 (kg) Weight(kg)	300	500	900	1400	1900	2500	3100	3600	5300	6800	7800

注：以上产品材质为碳钢C，不锈钢P。

The above-mentioned products can be made in A3 steel or stainless steel according to customer's requirements.

概述

CH型混合机广泛用于混合粉状湿粉或湿性物料，使不同比例主辅料混合均匀。

本机于物料接触处均采用不锈钢制造，桨叶与桶身间隙小，混合无死角，搅拌轴两端设有氟套密封装置，能防止物料外泄，广泛适用于制药、化工、食品等行业。



General descriptions

Model CH mixing is wide suitable for mixing power or damp raw material and make primary and auxiliary raw material can be mixed uniformly.

All parts that can be contacted with raw material are made of stainless steel, The gap between oar-blade and drum body is small. When mixing, there is no dead corner. At both ends of stirring shaft, it is installed seal device, Therefore it can prevent from raw material leaking out. It is wide used for pharmaceutical industry, chemical industry, foodstuff industry and so on.

技术参数 Technical Parameters

型号Model	150	200	300	500	750	1000	1500	2000	2500	3000
全容积Total volume(L)	150	200	300	500	750	1000	1500	2000	2500	3000
投料量Material feed(kg/batch)	30	40	60	120	150	270	400	550	630	750
搅拌转速Stirring speed(r/min)	24	24	24	20	19	19	14	12	12	10
混合电动机功率Admix power(kw)	3	4	4	5.5	7.5	7.5	11	11	15	18.5
卸料电动机功率Discharge Power(kw)	0.55	0.55	1.5	2.2	2.2	3	3	4	4	5.5
外形尺寸Overall dimensions(mm)	1360×540 ×1100	1460×600 ×1200	1900×750 ×1300	2150×860 ×1560	2300×1260 ×800	2500×1300 ×860	2600×1400 ×940	3000×1500 ×1160	3500×1620 ×1250	3800×1780 ×1150



GHJ. High-speed Mixer

GHJ 型立式高速混合机由底部送料叶浆和高速碎料叶浆组成。送料叶浆将底部物料连续不断沿筒壁向上送料。高速碎料叶浆将料叶浆送来的物料彻底打碎。使物料循环形成漩涡状，在较短时间内达到将物料混合均匀的目的。

GHJ Vertical high speed mixer consists of the feeding blades at bottom and high speed crushing blades. The blades at bottom make the material raise along the wall of mixing tank continuously and the high speed crushing blades crush the material. It makes the material circulating as vortex shape, and mixed uniformly in a short time.

GHJ技术参数 Technical parameters

型号 Model	工作容积 (L) Working volume(L)	搅拌重量 (kg/批) Stirring weight (Kg/batch)	装机功率 (kw) Installed power(kw)	重量 (kg) Weight(kg)	外形尺寸 (mm) Overall dimension (mm)
GHJ-350	350	150-200	13.2	600	1500×1090×1200
GHJ-600	600	200-300	17.2	900	1500×1090×1300

用途 Use

HGD 系列固定料斗混合机，主要用于制药工业中固体颗粒，粉末等物料的混合，具有传动平稳、结构可靠，混合量大，混合均匀度高的优点。

HGD series fixed hopper mixer, mainly used for solid particles in the pharmaceutical industry, powder and other materials, with a smooth transmission, reliable structure, mixing amount is large, the advantages of high mixing uniformity.



产品特色 Product Features

- 1、料斗内壁光滑无死角，易清洗，全封闭状态下混合，可实现无尘生产，符合 GMP 要求。
- 2、混合均匀度达 99%，装料系数达 50%–80%。
- 3、可设定混合时间，混合转速等工艺参数。变频调速控制，机器起停平稳无振动。
- 4、放料阀有防误装置，可拆卸，易清洗。

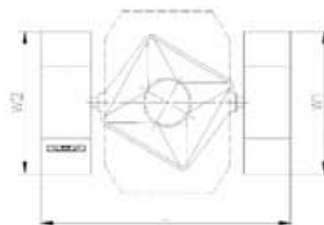
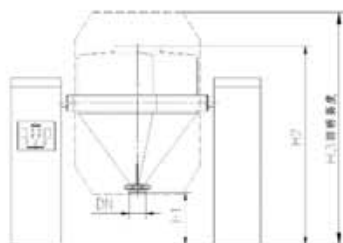
1. hopper wall smooth, no dead angle, easy to clean, fully closed mixed, can realize clean production, meet the requirements of GMP.

2. the mixing uniformity was 99%, coefficient of 50%–80%.

3. set the mixing time, mixing speed and other process parameters. Frequency control of motor speed, the machine stops smoothly without vibration.

4. the discharge valve with anti misoperation device, removable, easy to clean.

主要技术参数 Main Technical Parameters



型号	主要结构尺寸							容积 L	净载荷 kg	混合转速 rpm	机器重量 T	总功率 kw
	L	W1	W2	H1	H2	H3	DN					
HGD-400	2100	1450	1150	800	1900	2250	150	400	200	3-20	0.6	1.5
HGD-500	2250	1605	1250	800	2065	2405	150	500	250	3-20	0.7	2.2
HGD-600	2350	1700	1250	800	2120	2500	200	600	300	3-20	0.9	2.2
HGD-800	2500	1825	1250	800	2230	2625	200	800	400	3-20	1	3
HGD-1000	2750	1900	1250	800	2300	2700	200	1000	500	3-15	1.1	3
HGD-1200	2880	1950	1400	800	2430	2750	200	1200	600	3-15	1.2	4
HGD-1500	3000	2000	1400	800	2540	2800	250	1500	750	3-15	1.3	4
HGD-2000	3200	2350	1400	800	2680	3150	250	2000	1000	3-15	1.7	5.5
HGD-2500	3400	2500	1600	800	2840	3300	250	2500	1250	3-12	1.9	5.5
HGD-3000	3750	3050	1600	800	3000	3850	250	3000	1500	3-12	2.4	7.5



Grinder、Sieve and Supplementary Series

粉碎、分筛及其它配套系列



B系列万能粉碎机 B Series Universal Grinder

主要用途及特点 Main Applications and its Features

本机适用于医药、化工、农药、食品及粮食等行业。用途极为广泛。

本机利用活动齿盘和固定齿盘间的高速相对运动，使被粉碎物可直接由主机磨腔中排出，粒数大小通过更换不同孔径的网筛获得。

This machine has wide application and is wide used for pharmaceutical industry, chemical industry, pesticide industry, foodstuff industry, grain industry and so on.

This machine used the relative motion between movable and fixed teeth disc, the raw materials to be crushed undertakes the comprehensive actions such as impacted by teeth, friction, impacted between raw materials, finally the raw materials are crushed. Its features are simple and solid in structure, stable in operation, high crushed efficiency. The crushed raw material can be discharged through the grinding chamber. Moreover, different size or raw material to be crushed raw material can be discharged through the grinding chamber. Moreover, different size of raw material to be crushed can be got through exchanging screen with different mesh.



技术参数 Technical Parameters

型号 Mode	20B	30B	40B	60B
生产能力 Productive capacity(kg/h)	60-150	100-300	160-800	500-1500
主轴转速 Revolution of main shaft(r.p.m)	4500	3800	3400	2800
最大进料粒度 Max size of raw material to be fed(mm)	6	10	12	15
成品细度 (目) Degree of fineness of finished product(目)	60-120	60-120	60-120	60-120
电机功率 Power of Motor(kw)	4	5.5	11	15
重量 Weight(kg)	250	320	550	680
外型尺寸 (长×宽×高) Overall dimensions(LWH)(mm)	350×600×1250	600×700×1450	800×900×1550	1000×900×1680

注：表中产量因物料差异和目数不同，仅供参考。

Notes: the output listed in table will be different with different raw materials, for reference only.

B-X系列万能粉碎机组 B-X Series Effective And Universal Grinder

结构原理及作用 Principle of Structure and its Function

本粉碎机组由粉碎机、ESC物料收箱和ESC吸尘器组成。解决物料在粉碎过程中粉尘飞扬。

本机的工作原理是物料进入粉碎室，在高速旋转的活动齿盘与固定齿盘间受齿的冲击、剪切、摩擦及物料间的相互撞击的作用下被粉碎，经筛网筛选后即成为所需的粉料。

本粉碎机组的粉碎机、物料收集箱和吸尘器，全部采用不锈钢材料制作。符合药品生产的“GMPS”的要求。

The grinder set consists of Model grinder, EXC collector of raw material and ESC collective duster. It solves the problem, i.e. the dust is flying during the period of crushing raw material.

The principle of work is as follows; after raw material is fed into the crushing chamber, it undertakes the comprehensive actions such as impacted by teeth, shearing force, friction, impacted between raw materials finally the raw materials are crushed. Through sieving. The needed powder can be got.

The grinder, collector of raw material and ESC collective duster are all made of stainless steel and are in conformity with the requirement of GMP.



型号 Mode	20B-X	30B-X	40B-X	60B-X
生产能力 Productive capacity(kg/h)	60-150	100-300	160-800	500-1500
主轴转速 Revolution of main shaft(r.p.m)	4500	3800	3400	2800
最大进料粒度 Max size of raw material to be fed(mm)	6	10	12	15
成品细度 (目) Degree of fineness of finished product(目)	60-120	60-120	60-120	60-120
电机功率 Power of Motor(kw)	4	5.5	11	15
重量 Weight(kg)	250	320	550	680
外型尺寸 (长×宽×高) Overall dimensions(LWH)(mm)	350×600×1250	600×700×1450	800×900×1550	1000×900×1680

注：表中产量因物料差异和目数不同，仅供参考。

Notes: the output listed in table will be different with different raw materials, for reference only.

主要用途及特点 Main Applications and its Features

该两种系列微粉碎机和超微粉碎机，由主机、辅机、电控三个部分组成，设计紧凑、结构合理，具有风选式、无筛无网。机内装有分级机构，能使粉碎、分级一次完成。负压输送使粉碎作业时机腔内产生的热能源源不断地排出，故也适用于热敏性物料的粉碎。本机适应范围广，生产过程连续进行，出料粒度可调；能处理如：化学制品、食物、药品、化妆品、染料、树脂、壳物等多种物料的粉碎及分级。

Model WFJ series fine grinder or Model CWFJ series super fine grinder consists of three parts i.e. main machine, auxiliary machine and electric control. Its features are compact in design, reasonable in structure. Its principle is using air to choose and no sieve or screen. Being installed grading mechanism inside the machine, the crushing and grading can be finished at the same time. When use negative pressure to transport in the operation of crushing, the heat produced from the chamber will be removed continuously. Therefore it can also be suitable for crushing thermal sensitive raw materials. The scope of application of machine is wide. Its productive process is continuous and its size of granule can be adjusted. It can crush and grade many raw materials such as chemicals, foodstuff, medicines, cosmetic, dyestuff, resin, shell materials and so on.



技术参数 Technical Parameters

规格型号 Specification and model	WFJ-15	WFJ-18	WFJ-36
生产能力 Productive capacity(kg/h)	10-200	20-450	60-1000
进料粒径 Size of raw material to be fed(mm)	<10	<12	<15
出料粒度(目) Size of raw material to be discharged(mesh)	80-320	80-450	80-450
总功率 Total power(kw)	13.7	19.07	38.85
主转速 Main revolution(r/min)	4500	4480	4000
外形尺寸 Overall dimensions(L×W×H)(mm)	5410×1660×2500	5500×1800×3100	9000×2200×4000

注：表中产量因物料差异和目数不同，仅供参考。
Notes: the output listed in table will be different with different raw materials, for reference only.

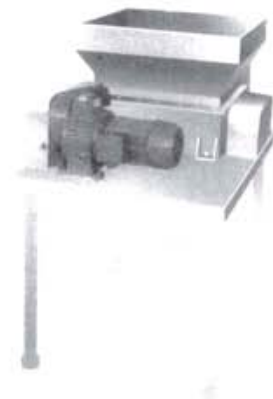
PSJ-500型破碎机 Model PSJ-500 Crusher

结构原理及作用

该机通过双轴上的刀排与栅格的剪刀破碎，把滤饼状或因受潮而结成块状的物料进行破碎，达到破碎的目的。破碎粒度通过调节双轴转速来调整，该机适用于松散性块状物料的破碎，为物料的干燥及粉碎提供前道处理。

Principle of Structure And Its Function

The crushing is realized through the shearing action between rows of knives and grind on the double shaft. It makes filtering cake raw material caused by damp to crush. The crushing size can be adjusted through control revolution of double shafts. This machine is suitable for crushing incompact and caked raw material. It provides the first procedure to dry and crush raw material.



技术参数 Technical Parameters

规格 Specification	功率 Power (kw)	破碎轴转速 Speed of shaft (r.p.m)	产量 Output (kg/h)	重量 Weight (kg)
PSJ-500	1.5	20-600(可调) (adjustable)	200-500	500

注：表中产量因物料差异和数目不同，仅供参考。
Notes: the output listed in the table will be different with different raw materials, for reference only.

CSJ系列粗粉碎机 Model CSJ Series Roughness Crusher

用途 Applications

该机适用于制药、化工、冶金、食品、建筑等行业。对坚硬难粉碎的物料进行加工，包括对塑料、铜丝、中草药橡胶等进行粉碎，也能作为微粉碎机，超微粉碎机加工前道工序的配套设备。
This machine is suitable for many industries such as pharmaceutical industry, chemical industry, metallurgy industry, architecture industry and so on to crush hard raw materials plastics, steel wire, Chinese herbal medicine, rubber and so on. It can also be as complete equipment of fine grinder and super fine grinder as the first procedure.

特点 Fetures

该机是采用立式粉碎机构，不受物料粘度、软度等的限制，对任何物料都能起到很好的粉碎作用。
This machine adapts vertical crushing mechanism. It can not be limited by visosity, hardness and softness of raw materials. It has good crushing effect to all kinds of raw materials.



工作原理

物料由进料斗送进粉碎室，经刀刃和刀座的冲击，旋转刀和固定刀同时剪切粉碎，由于受到旋转离心力的作用，物料自动从出口处流出。

Principle of work

Raw material is fed into crushing chamber through hopper and then impacted by the edges of knives and seat of knives and crushed by rotating and fixed knives through shearing. Being undertaken the centrifuge force, raw material will be discharged at its outlet automatically.

技术参数 Technical Parameters

型号 Model	CSJ-250	CSJ-500
进料粒度 Inlet material diameter(mm)	≤100	≤100
出料颗粒 Output diameter(mm)	0.5-20	0.5-20
主轴转速 Speed of shaft(r.p.m)	940	1000
功率 Power(kw)	4	11
产量 Output(kg/h)	50-300	80-800
外形尺寸 Overall dimensions(mm)	860 × 650 × 1020	1120 × 1060 × 1050

注：表中产量因物料差异和数目不同，仅供参考。
Notes: because the raw materials exist indifferrence, the output in the table is for reference only.



用途

ZS系列分层筛适合于流水作业，是大小颗粒比例不等于过筛连续出料的理想设备。

Applications

ZS series vibration sieve is suitable for in line production. It is an ideal device for granule that has uneven size continuously.

结构特征

本机由料斗、振荡室、联轴器、电机组成。振荡室内有偏心轮、橡胶软件、主轴、轴承等组成。可调节的偏心重锤经马达驱动传达到主轴中心线，在不平衡状态下，产生离心力，使物料强度改变在筛内形成轨道漩涡。重锤调节器的振幅大小可根据不同物料和筛网进行调正。

整机结构紧凑、体积小、不扬尘、噪音低、质量高、能耗低，移动，维修方便。

Structural Features

The machine consists of hopper, vibration chamber and coupling and motor. There are eccentric wheel, rubber soft parts, main shaft bearing and so on. The adjustable eccentric weight can drive to the central line of main shaft through motor. Under the unstable state, it produces centrifugal force that makes raw material form vortex in the sieve. The size of amplitude of eccentric weight can be regulated in accordance with the different raw materials.

The whole structure of machine is compact, small in volume, no dust, low in noise, low in energy consume, convenient in moving and maintenance.



技术参数 Technical Parameters

型号 Model	生产能力 Production capacity(kg/h)	过筛目数(目) (Mesh)	电机功率 Power of motor(kw)	主轴转速 Revolution of main shaft(r/min)	外形尺寸(毫米) Overall dimension(mm)	净量 Net weight(kg)
ZS-365	60-500	12-200	0.55	1380	540 × 540 × 1060	100
ZS-515	100-1300	12-200	0.75	1370	710 × 710 × 1290	180
ZS-650	180-2000	12-200	1.50	1370	880 × 880 × 1350	250

注：因物料的差异，表中生产能力仅供参考

Notes: The output listed in the table is for reference only because of the specific gravity and mesh.

ZS-800,1000,1500型振动筛
MODEL ZS-800,1000,1500 VIBRATING SIEVE

简介 Brief Introduction

本机是目前国内使用较为广泛的高效筛分设备，它采用振动原理实现物料大批量筛选。该机可广泛应用于冶金、化工、制药、粮食等行业。

This machina is high effective sieving equipment used wide in china now, it adapts the principle of vibration to realize the sieving of plenty of raw materials. It is wide used for metallurgy industry, chemical industry, pharmaceutical, grain industry and so on.

技术参数 Technical Parameters

筛子公称直径 Sieve Normal diameter	800mm	1000mm	1500mm
产量 Output(kg/h)	250-3500	300-4000	340-4500
过筛目数 Mesh	5-325	5-325	5-325
振动频率 Vibration frequency	1500HZ	1500HZ	1500HZ
功率 Power(kw)	1.5	1.5	2
外形尺寸 Overall dimensions(mm)	900 × 900 × 1200	1100 × 1100 × 1200	1600 × 1600 × 1200

注：因物料的差异较大表中产量仅供参考。

Notes: because the raw materials exist indifference, the output in the table is for reference only.

FS系列方形筛 Model FS Series Square Sieve

结构 Brief Introduction

本机上部采用快拆式手柄，把整机连成一个整体，上盖采用全密封，有效防止物料在过筛时由于振动而产生粉尘飞扬。筛体下部安装振动电机，有效保证了物料的结构紧凑，下部采用弹簧减振，使整机在平稳状态下工作。下面底座采用可调式，可调正在过筛时的筛面倾斜角度，根据物料特征以取得最佳过筛效果。



Structure

It adapts quick disassembling handle at the upper part of this machine. The handle connects the machine as the all and the one. Its upper cover is seal fully. Therefore it prevent from the dust flying caused by vibration during the period of sieving. The vibration motor is installed under the sieve. Meanwhile it adapts spring to reduce vibration. So the machine will operate at state. The stand is adjustable, so the inclined angle of sieve that is sieving can be adjusted. The best sieving effect can be got.

主要用途及特点

FS系列方形筛，是我厂九九年自行开发研制的新一代筛粉设备，该机以它独有的高效、节能、低噪音等特性深受广大用户的欢迎，广泛适用于医药、化工、食品等行业的各种物料连续过筛，根据用户需要可制成1-4层筛面。

该机具有机构简单、操作方便、体积小、处理量大、噪音低、抗腐蚀、低故障、寿命长、生产率高、振幅可调、耗能低、拆装方便、清洗无死角、无粉尘飞扬等优点。

Main Applications and Its Features

FS series square sieve is new generation sieving equipment researched and developed and manufactured by our factory in 1999. Because of its unique characteristics,i.e high effective, energy saving, low noise and so on, customers welcome it deeply. It is wide suitable for sieving raw material continuously of pharmaceutical industry, chemical industry, foodstuff industry and so on. 1-4 layer of sieve can be installed in accordance with the requirements of customers.

This machine has many advantages listed below; simple in structure, convenient in operation, compact, large amount to be treated, low in noise, corrosion resistant, low trouble, convenient in assembling and disassembling, no dead corner in cleaning, no dust and so on.

Mian Applications and Its Features

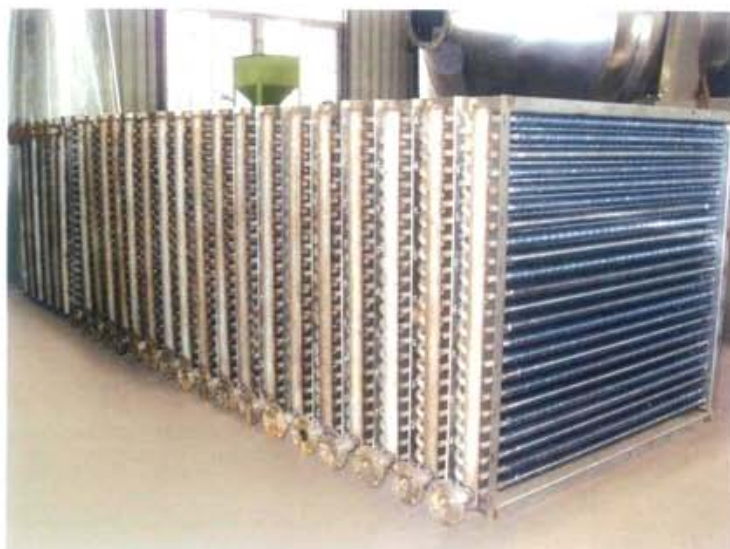
型号规格 Model and specifications	功率 Power (kw)	筛面倾角 Inclined angle of sieve surface	电压 Voltage (v)	筛面层数 Layers of sieve surface	过筛目数(目) (Mesh)	外形尺寸 Overall dimesion (mm)	重量 Weight (kg)	产量 Output (kg/h)
FS0.6×1.5	0.4	0°-450可调	380	1-4	6-120	1500×700×700	550	150-1500
FS0.6×2.0	0.4	0°-450可调	380	1-4	6-120	2100×750×780	650	160-2000

注：因物料的差异，表中生产能力仅供参考

Notes:The output listed in the table is for reference only because of the specific gravity and mesh.

SRZ型散热器（绕片式散热器） SRL型散热器（钢铝轧制散热器）

SRZ Model Radiator(Coiled Pieces Radiator) SRL Model Radiator(Rolled aluminum and Steel Radiator)



工作原理 Working Principle

SRZ和SRL型螺旋翅片式散热器，主要用于干燥系统中空气加热，是热风装置中的主要设备，散热器采用的热介质可以是蒸汽或热水，也可用导热油，蒸汽的工作压力一般不超过0.8MPa，热空气的温度则在150℃以下。

Model SRZ and SRL helix wings radiators are mainly used for heating air in drying system and are main equipment of hot air device. The medium to be used in the radiator may be steam or hot water or hot leading oil. In generally, the working pressure of steam should less than 0.8MPa. The temperature of hot air should be below 150℃.

技术参数 Technical Parameters

型号 Model	换热管 Heat Exchange Pipe			换热面积 Area of heat exchange(m ²)	外型尺寸 Overall dimensions(mm)
	规格 Specification	长度Length(mm)	数量quantity(根/piece)		
SRZ5 × 5D	Ø18 × 2	512	32	10	580 × 580 × 180
SRZ6 × 6D	Ø18 × 2	612	41	15	680 × 680 × 180
SRZ7 × 7D	Ø18 × 2	712	47	20	780 × 780 × 180
SRZ10 × 5D	Ø18 × 2	1012	32	20	1080 × 580 × 180
SRZ10 × 6D	Ø18 × 2	1012	41	25	1080 × 680 × 180
SRZ12 × 6D	Ø18 × 2	1212	41	31	1280 × 680 × 180
SRZ15 × 6D	Ø18 × 2	1512	41	38	1580 × 680 × 180
SRZ10 × 7D	Ø18 × 2	1012	47	28	1080 × 780 × 180
SRZ12 × 7D	Ø18 × 2	1212	47	36	1280 × 780 × 180
SRZ15 × 7D	Ø18 × 2	1512	47	42	1580 × 780 × 180
SRZ15 × 10D	Ø18 × 2	1512	68	62	1580 × 1080 × 180
SRZ20 × 10D	Ø18 × 2	2012	68	85	2080 × 1080 × 180

JRF系列燃煤热风炉

MODEL JRF SERIES COAL FUEL HOT AIR FURNACE

概述 General Descriptions

我厂制造的JRF系列立筒式金属体燃煤间接加热热风炉产品，是由中国农业工程研究院设计，经过五次升级换代达到了国内领先水平，并于一九八九年二月二日获得国家专利技术产品。该炉采用了集燃烧与换热为一体，以炉体高温进行换热的最新间接加热技术。烟气和空气各走其道，加热绝对无污染，热效率高达65%~80%，升温快，体积小，安装方便，使用可靠，具价格低（与1吨锅炉相比，该加热系统只相当于锅炉加热系统价格的一半）。采取了耐高温措施，从而使其寿命比列管式热风炉大大提高，输出热风温度可达300℃，采用特殊设计输出热风温度可达500~800℃，同时采用了烟气纵向冲刷散热片和负压吸式排烟方式，换热部位不积灰尘，无须清理，热性能温度。可使用各种煤或柴作燃料，并配有二次进风装置，燃烧完全。该炉的各项技术经济指标均达到了国内领先水平。

该列为通用性热风加热装置，与各种物料的干燥设计设备使用。广泛用于粮食、种子、饲料、果品、脱水蔬菜、香菇、木耳、银耳、茶叶、烟叶等农产品、食品、医药药品、化工原料、轻重工业产品的加热除湿。还可用于各种设施的加热以及库房除湿等。

目前该炉已形成十个产品，三大系列，其输出热量为

1.045 × 10 ⁵ kJ/h	1.672 × 10 ⁵ kJ/h	3.344 × 10 ⁵ kJ/h
6.270 × 10 ⁵ kJ/h	1.254 × 10 ⁶ kJ/h	1.672 × 10 ⁶ kJ/h
2.508 × 10 ⁶ kJ/h	3.344 × 10 ⁶ kJ/h	
6.688 × 10 ⁶ kJ/h	8.360 × 10 ⁶ kJ/h	

Model JRF series coal fuel hot air furnace manufactured by our factory is a vertical cylinder metallic case coal fuel indirect heating hot air furnace. It was designed by China Agricultural Engineering Institute. Through five times improving, its quality is in the leading position in China. It had been approbated as China paten product on February 2,1989. The furnace integrates combustion and heat exchange in its one body and adapts the newest indirect heating technology with the part of high temperature to carry out heat exchange. its heat efficiency can reach as high as 65%~80%. Its features are quick in temperature raising, compact, convenient in installation, reliable in operating, cheap in price(Compared with 1 ton of boiler, its price of heating system is half only). Being adapted the measure of high temperature resistant, its life is longer than calandria type hot air furnace greatly.The temperature of sent hot air will be 300℃ .If adapt special design,the temperature of sent hot air will be 500-800,Meanwhile being adapted vertical scouring type radiation and negative pressure suction to remove smoke,the place of heat exchange does not accumulate dust.So it does not need to clean and its thermal performance is stable.It can use all kinds of coal of firewood as fuel.Being equipped secondary air in device ,its combustion is fully.All technical and economic indexes are in leading place domestic.

The furnace is a universal hot air heating device,It can be equipped with all kinds of drying equipment .It is wide used for damp removing of agricultural products such as grain,seeds,feedstuff,fruits,dehydrated vegetables,passnia fungus,agaric,white fungus,tea,tobacco leaf;foodstuff,medicines,chemical raw materials,products of light and heavy industry,It can also used for all kinds of facilities to heat and warehouse to remove damp.

At present the furnace has ten varieties and three series.Its heat to be output is

1.045 × 10 ⁵ kJ/h	1.672 × 10 ⁵ kJ/h	3.344 × 10 ⁵ kJ/h
6.270 × 10 ⁵ kJ/h	1.254 × 10 ⁶ kJ/h	1.672 × 10 ⁶ kJ/h
2.508 × 10 ⁶ kJ/h	3.344 × 10 ⁶ kJ/h	
6.688 × 10 ⁶ kJ/h	8.360 × 10 ⁶ kJ/h	



技术参数 Technical Parameters

参数Parameter 型号 Model	输出热量	输出风量	输出温度	耗煤量	烟气引风机型号
	Heat output(Kj/h)	Air output(m3/h)	Temperature(℃)	Coal consume	Model of fan for smoke
JRF4-2.5	1.045 × 10 ⁵	1500-560	60-200	10-12	炊事机鼓风机 fan for cock 80-100w
JRF4-4	1.672 × 10 ⁵	3500-930	60-200	14-17	炊事机鼓风机 fan for cock200-300w
JRF4-8	3.344 × 10 ⁵	5600-1480	60-200	18-24	Y5-47 No2.8C 1.1Kw
JRF5-15	6.270 × 10 ⁵	12000-2160	60-250	40-45	Y5-47 No4C
JRF5-30	12.54 × 10 ⁵	25000-4330	60-250	80-85	Y5-47 No4C 30Kw
JRF5-40	16.72 × 10 ⁵	28000-5600	60-250	115-125	Y5-47 No4C 30Kw
JRF5-60	25.08 × 10 ⁵	45000-8660	60-250	160-170	Y5-47 No4C 5.5Kw
JRF6-80	33.44 × 10 ⁵	83000-12500	60-350	240-250	GY2-1 11Kw
JRF6-160	66.88 × 10 ⁵	134400-23000	60-350	480-490	GY4-1 18.5Kw
JRF6-200	83.60 × 10 ⁵	170000-28000	60-350	600-620	GY4-1 18.5Kw

注:

1. 输出温度指输入温度在20℃时的升温值。
2. 输出温度高于300℃时，热风炉内壁采用不锈钢等耐高温材料制造，价格另议。
3. 煤的燃烧值按22990 KJ/kg或5500kcal/kg计算。
4. 设备布置图来函索取。
5. 输出温度在特殊设计时可达500℃~800℃，价格另议。

- 1.The output temperature means the raised temperature from 20℃ of input temperature .
- 2.If the output temperature is high than 300℃, The inner wall of furnace is made of raw materials, such as stainless steel and so on that can withstand high temperature. The price should be discussed face to face.
- 3.The fuel value of coal is calculated based on 22990KJ/kg
- 4 The layout of equipment will be provided as request.
- 5.The output temperature will be 500℃—800℃ when it is designed specially. The price should be discussed face.



JRFY系列燃油、燃气热风炉 Model JRFY Series Oil Fuel、Gas Fuel Hot Air Furnace

概述 General Descriptions

我厂自行设计制造的JRFY系列卧式金属体燃油间接加热热风炉是集燃烧与换热为一体，热效率高的热风加热装置(热效率可达65%-85%)。输出的热风温度可达300℃，特殊设计可达500℃—800℃。烟气和空气各走其道，故经换热后的空气为洁净的热空气。能与各种干燥设备配套使用。广泛用于粮食、种子饲料、果品、脱水蔬菜、香菇、木耳、银耳、茶叶、烟叶等农产品和医药药品、化工原料等产品的加热除湿。

Model JRFY series horizontal metallic case oil fuel indirect fuel hot air furnace integrates combustion and heat exchange in its one body and is a hot air heating device with high thermal efficiency(Its thermal efficiency will be 65-85%). The output temperature of hot air will be 300℃. If design specially, it can be 500℃~800℃. Smoke and air has its own pass, The air through heat exchange is clean hot one. It can be equipped with different drying equipment. It is wide used for heating and damp removing of agricultural, medical and chemical products such as grain, seeds, feedstuff fruits, dehydrated vegetables, passanla fungus, agaric, white fungus, tea, tobacco leaf, foodstuff, medicines, chemical raw materials.



特点 Features

操作方便，劳动强度低。
设备结构紧凑，占地面积小。
采用进口燃烧器，燃烧完全，无环境污染。
Convenient in operation and low in labor strength.
The equipment is compact and covers small area.
Being adapted imported combustor, its combustion is full and no environment pollution.

技术参数 Technical Parameters

参数Parameter 型号 Model	输出热量 Heat output(KJ/h)	输出风量 Air output(m ³ /h)	输出温度 Temperature(°C)	耗油量 Oil consume	燃烧器的型号 Type of combustor
JRF4-2.5	1.045 × 10 ⁵	1500-560	60-200	4-5	M4
JRF4-4	1.672 × 10 ⁵	3500-930	60-200	6-7	M8
JRF4-8	3.344 × 10 ⁵	5600-1480	60-200	11.5-13.5	M12
JRF5-15	6.270 × 10 ⁵	12000-2160	60-250	21.5-25	M20
JRF5-30	12.54 × 10 ⁵	25000-4330	60-250	43-50	MP35AB
JRF5-40	16.72 × 10 ⁵	28000-5600	60-250	57-67	MP45AB
JRF5-60	25.08 × 10 ⁵	45000-8660	60-250	86-100	MP80AB
JRF6-80	33.44 × 10 ⁵	83000-12500	60-350	114-135	MP130AB
JRF6-160	66.88 × 10 ⁵	134400-23000	60-350	228-270	MP200AB
JRF6-200	83.60 × 10 ⁵	170000-28000	60-350	286-334	MP300AB

注:

1. 输出温度指输入温度在20℃时的温升值。
2. 煤的燃烧值按41800 KJ/kg计算。
3. 设备布置图来函索取。
4. 燃烧器型号系意大利“利雅路”燃烧机的型号，也可选用同类规格的其他燃烧机。

1. The output temperature means the raised temperature from 20℃ of input temperature

2. The fuel value of oil is calculated based on 41800KJ/kg.

3 The layout of equipment will be provided as request.

4. The type of combustor is Italy, Other type can also be used.



JRML系列链条炉排燃煤热风炉

JRML SERIES COAL FURNACE OF CHINA

概述 General Descriptions

JRML系列高温燃煤热风炉全部采用机械链条式炉排燃煤装置，换热装置可采用高温板式、管式。热管等换热器，具有输出温高，热值大，热效率高等优点。可制备100—550℃的清洁热风，设备各项技术指标达到国内先进水平，广泛应用于化工、食品、矿产品、建材等行业。可作为加热、干燥、烘焙、热定型的理想热源，可与各种干燥设备配套使用。

The drier is equipped with mechanical line eject coal fuel and is adopted. The heat exchanger can be chosen in high-temperature plate, pipe and hot pipe. Its temperature of outlet is high, and heat factor is high and the temperature of cleaning hot air is form 100-550℃. The technical parameters of drier is reached to advanced level in home. The drier is widely used for heating, drying and hot shaping in chemical industry, foodstuff, mineral, building industry and so on.



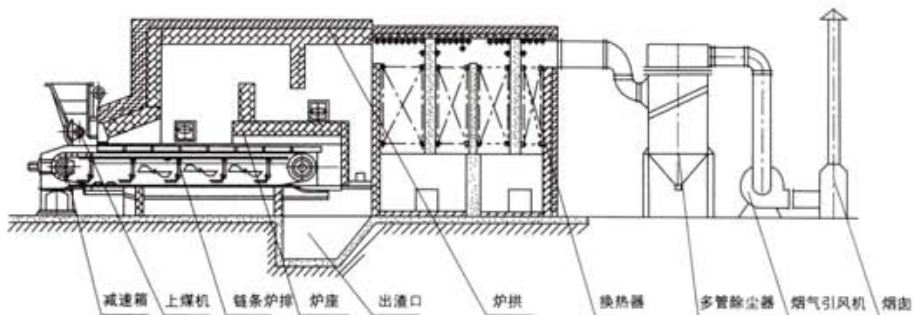
应用范围

- 化工行业：化工产品干燥
- 粮食行业：粮食脱水、烘干
- 食品行业：食品烘焙
- 建筑行业：沥青溶解。混凝土热化缸
- 木材行业：人造纤维板、刨花板，木材干燥
- 空调行业：暖气热源
- 直种植行业：蔬菜大棚供热
- 纺织印染业：热定型机、树脂整理机干燥

Application

- Chemical industry: Drying for produce
- Grain processing: Damp removing and drying
- Foodstuff: Drying food
- Build
- Wood processing: Wood drying, fibre plate and compound plate drying
- Air condition: Hot air sevice
- Agriculture
- Textile printing and dyeing

结构示意图 Sketch of Oven



技术参数 Technical Parameters

型号 Model	输出热量 Heat output(KJ/h)	输出风量 Air output(m³/h)	输出温度 Temperature(°C)	耗煤量 Coal consume	烟气引风机型号 Model of fan for smoke
JRML-100	4.2 × 10 ⁶ KJ/h (1 × 10 ⁶ kcal/h)	由输出温度定 Decided by output Temperature	100-450	240-260	Y5-47NO5 7.5kw
JRML-120	5.0 × 10 ⁶ KJ/h (1.2 × 10 ⁶ kcal/h)		100-450	280-320	Y5-47NO5 7.5kw
JRML-180	7.5 × 10 ⁶ KJ/h (1.8 × 10 ⁶ kcal/h)		100-550	420-460	Y5-47NO6 15kw
JRML-240	10 × 10 ⁶ KJ/h (2.4 × 10 ⁶ kcal/h)		100-550	500-550	Y5-47NO6 18.5kw
JRML-300	12.5 × 10 ⁶ KJ/h (3 × 10 ⁶ kcal/h)		100-550	680-700	Y5-47NO8 22kw
JRML-360	15 × 10 ⁶ KJ/h (3.6 × 10 ⁶ kcal/h)		100-550	800-860	Y5-47NO8 30kw
JRML-420	17.5 × 10 ⁶ KJ/h (4.2 × 10 ⁶ kcal/h)		100-550	950-1020	Y5-47NO5 30kw
JRML-480	20 × 10 ⁶ KJ/h (4.8 × 10 ⁶ kcal/h)		100-550	1100-1200	Y5-47 NO9 45Kw
JRML-600	25 × 10 ⁶ KJ/h (6 × 10 ⁶ kcal/h)		100-550	1350-1460	Y5-47 NO10 55Kw
JRML-720	30 × 10 ⁶ KJ/h (7.2 × 10 ⁶ kcal/h)		100-550	1600-1750	Y5-47 NO10 55Kw
JRML-780	32.5 × 10 ⁶ KJ/h (7.8 × 10 ⁶ kcal/h)		100-550	1780-1900	Y5-47 NO10 75Kw
JRML-960	40 × 10 ⁶ KJ/h (9.6 × 10 ⁶ kcal/h)		100-550	2100-2250	Y5-47 NO12 75Kw

工作原理 Working

含尘气流从进气口入下箱体后，部分沉降，轻微粉尘浮动时被滤袋阻留，净化空气透过滤袋。经文氏管进入上箱体，从出口排出。积附在滤袋外壁的粉尘不断增加，当阻力在规定的范围内(一般为80—120毫米水柱)，就要清除积附的滤袋外壁的粉尘。清灰是由控制器顺序触发各控制阀，气包内，的压缩空气通过喷吹管使布袋在一瞬间急剧膨胀，伴随着气流的反作用，抖落的粉尘落入灰门经排灰阀排出机体。

The air stream containing dust passes through low box from air inlet. Parts of it deposit. When light particle dust is floated, it is retarded in the bag. The purified air penetrates the filtrating bag and passes into the up box through venturi tube and exhausts from outlet. The accumulated powder dust on the outer wall of filtering bag.



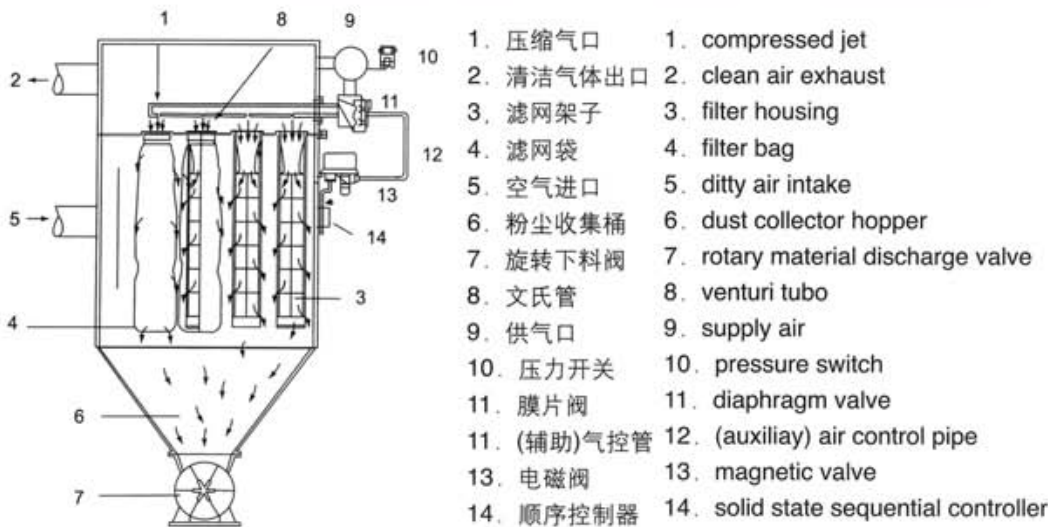
应用范围 Application

广泛应用于：合金。铸造。矿山。化工。医药。饲料。建材。粮食加工等行业的通风除尘和粉尘回收。

The equipment is widely used for ventilation and dedusting and recovering powder dust of metallurgy industry, casting industry, mine, chemical industry, pharmaceutical industry, construction material industry, fed industry, grain processing industry and so on.



结构示意图 Sketch of Oven



技术参数 Technical Parameters

参数Parameter	型号 Model	MC24	MC36	MC48	MC60	MC72	MC84	MC96	MC120
过滤面积Area to be filtered(m ²)		18	27	36	45	54	63	72	90
滤袋数量 (只) Quantity of filtering bag(piece)		24	36	48	60	72	84	96	120
过滤风速Speed of filtering air(m/min)		2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
处理风量Filtering air volume(m ³ /h)		2160-4300	3250-6480	4320-8630	5400-10800	6450-12900	7550-15100	8650-17300	10800-20800
最大外形尺寸(mm) Max. overall dimension	长Length(mm)	1025	1425	1820	2225	2625	3025	3582	4385
	宽Width × 高Height(mm)	1678 × 3660							
清灰装置 Dust remover	脉冲阀数量Pulse calve number	4	6	8	10	12	14	16	20
	耗用压缩空气量Compressed air consumption(m ³ /min)	0.07-0.03	0.11-0.40	0.15-0.50	0.18-0.60	0.22-0.60	0.25-0.90	0.29-0.90	0.37-0.90
	压缩空气压力Compressed air pressure(Mpa)	0.5-0.8							

试验

设备

1. CT-C-O 型热风循环烘箱 CT-C-O Hot Air Circle Oven
2. FZG-15方型真空干燥机 FZG-15 Square Vacuum Dryer
3. SZG-500型双锥形回转式真空干燥机 SZG-500 Double Cone Rotating Vacuum Dryer
4. XF-10A箱式沸腾干燥机 XF-10A Box-Shaped Fluidizing Dryer
5. ZLG-0.3×3型振动流化床 ZLG-0.3X3 Vibration Fluidized Bed Dryer
6. DW-0.5×6 带式干燥机 DW-0.5X6 Belt Type Dryer
7. XSG-4型旋转闪蒸干燥机 XSG-4 Revolving Flash Vaporization Dryer
8. QG-50型气流干燥机 QG-50 Air Stream Dryer
9. ZLPG-10型中药浸膏喷雾干燥机组
ZLPG-10 Atomizing Drier For Immersed Ointment of Traditional Chinese Medicine
10. LPG-5型高速离心式喷雾干燥机 LPG-5 High-speed Centrifugal Atomizing Drier
11. HG-1200型滚筒刮板干燥机 HG-1200 Model Roller Scraper
12. ZB-200型真空耙式干燥机 ZB-200 Vacuum Harrow Dryer
13. FLP-3型流化造粒包衣机 FLP-3 Boiling And Granulating(Pellet) Dryer
14. PGL-5型喷雾干燥制粒机 PGL-5Atomizing Dry Granulator
15. 干式制粒机 Dry Granulator
16. JZL-300挤压造粒机 JZL-300 Extruding Granulating Machine
17. JZL-130挤压造粒机 JZL-130 Extruding Granulator
18. SES-100单螺杆挤压造粒机 SES-100 Screw Extruding Pelleter
19. QZL-500球形抛丸机 QZL-500 Pelletizer
20. YK-160摇摆式颗粒机 YK-160 Swaying Granulator
21. SYH-10三维运动混合机 SYH-10 Three Dimensional Mixer
22. EYH-150二维运动混合机 EYH-150 Planar Motion Mixer
23. CH-200型槽形混合机 CH-200 Slot Shape Mixer
24. 30B-X粉碎机 B-X Effective And Universal Grinder
25. ZS-515振荡筛 ZS-515 Vibrating Sieve



益民干燥

YIMIN DRYING



中国干燥实验基地

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客户选型反馈表

Feedback Form of Customers for Model Selection

请您按表格详细填写，以便本公司提供慎重的选型推荐：

Please fill the form in detail so that our company can provide best recommended model

单位 Unit: _____ 客户姓名 Name of customer: _____ 职务 Post: _____

地址 Add: _____ 联系电话 Tel: _____ 传真 Fax: _____

E-MAIL: _____ 联系时间 Date: _____

1. 干燥物料的形态: 微粉 粉料 颗粒 块状 片状 纤维状
Shape of raw material to be dried Micro powder Powder Granule Block Flake Fibric form

滤饼 糊状 膏状 液体
Filter cake Mushy Paste Liquid

2. 干燥物料的初含水 _____ %; 产品终含水 _____ %, PH值 _____,
Primary moisture of raw material Final moisture of finished product PH value

熔点 _____ °C, 物料最高承受温度 _____ °C, 物料松散程度 _____
MP Max. withstood T of raw material Bulk density of raw material

3. 湿分主要成份: _____
Main ingredient of damp powder

4. 水份存在的形式: 表面水 结晶水
Existed form of moisture Surface water Crystal water

5. 成品细度 _____ mm (目); 湿品堆比重 _____ kg/m³; 产品堆比重 _____ kg/m³;
Fineness of finished product Mesh Bulk specific gravity of damp product Bulk specific gravity of finished product

6. 物料有关其他特征:
Releitive other characteristics of raw materials

粘性 热敏性 软化点 相变点 腐蚀性(pH值) 异味 可燃性
Viscosity Thermal sensitive Softening point Transition point Causticity (pHvalue) Peculiar smell Inflammability

易爆性 静电性 透气性 团聚性 晶体或颗粒折易粉碎性
Explosion hazard Electric static Gas permeability Constipate Comminuted of crystal or granule

7. 干燥产量要求: 湿品 _____ kg/h或干品 _____ kg/h;
Requirement of output: Damp product or dried finished product

8. 颗粒产品能否破坏, 能 不能
Whether the granule can be damaged Yes No

9. 物料过去的干燥方法或类似产品的干燥方法: _____
The original dry method of raw material or dry method of similar products:

10. 干燥方式要求: 连续干燥 间隙干燥
Requirements of drying method Continuous drying Drying in batch

11. 可供的热源: 电、 蒸汽、 热水、 导热油、 燃气炉、 燃煤炉、 燃油炉;
Heat source to be supplied Electricity Steam Hot water Heat conduction oil Gas fuel furnace Coal fuel furnace Oil fuel furnace

12. 选购设备要求制作材质: _____
Required material for manufacturing equipment when selection:

13. 环保要求及对物料回收率的要求: _____
Requirements of environmental protection and requirements of yield

14. 可供安装场地: _____
Field to be installed:

15. 其他要求: _____
Other requirements:

