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## 常州市豪迈干燥工程有限公司

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引导行业变革、高效节能环保



常州市豪迈干燥工程有限公司

CHANGZHOU HAOMAI DRYING ENGINEERING CO.,LTD.



### 豪迈宗旨:

以质量求生存, 以信誉存发展。

注重科研创新和客户满意。

优质的产品和服务, 完整的、高效的、经济的行业解决方案

Credibility: Stricking to the promise and working with heart.

Industriousness: Working hard and steadily.

Cooperation: Promoting communication within the enterprise and maintaining mutual benefits with others.

Originality: Learning untriedly to meet the challenge.



豪迈干燥  
HAOMAI DRYING

# ABOUT HAOMAI

## 关于豪迈

常州市豪迈干燥工程有限公司是专业从事旋转闪蒸干燥机,离心喷雾干燥设备,振动流化床干燥机等设备的研发、制造、经营、出口以及相关服务的有限公司,生产基地座落于江苏省常州市郑陆镇三河口工业园。多年来设计的设备涉及医药、化工、农药、电子、矿业、食品、染料、颜料等领域。市场遍及全国各地。

豪迈不仅具有一批十年以上工作经验的精湛工程技术人员和高层管理人员,而且具有一批精良的生产人员。他们研究、设计、服务等方面具有卓越的能力,多年来他们潜心钻研,在实践上一次次总结,“天道酬勤”,深刻的认识是对客户产品质量有力的保障!

面临全球节省能源的课题,面临市场竞争的激烈场面,豪迈人不追求企业产值和利润最大化,但求产品质量的最好。质量好是我们成功的目标和方向,节能是我们脱颖而出取得胜利的绝密法宝。设备节能最大也是我们豪迈人的社会责任。多年来,我们设计的设备,在各行中取得了良好的经济效益和社会效益。面对过去,我们没有满足;我们倍加努力朝更高的目标迈进。

Changzhou Haomai Drying Engineering Co., Ltd. specializes in spin flash dryers, centrifugal spray drying equipment, vibrating fluid bed dryers and other equipment R & D, manufacturing, business and related services Limited, the production base is located in Zhenglu town, Changzhou City, Jiangsu, River industrial Park. Over the years the design of equipment involved in pharmaceuticals, chemicals, pesticides, electronics, mining, food, dyes, pigments and other areas. Market throughout the country.

Haomai not only with work experience in a group of more than a decade of lean engineering and technical personnel and senior management, but also has a number of excellent production staff. Their research, design, service and so has an excellent ability for many years they concentrated on studying in practice wrap-up, "Him", a deep understanding of effective guarantee for the quality of customers' products.

The face of global energy-saving issues, faced with fierce competition in the market scene, Haomai people is not the pursuit of enterprise value and maximize profits, but to the best of product quality. Good quality is our goal of success and direction of energy efficiency is top secret magic weapon we come to the fore the victory. Equipment, energy saving is our Haomai people's social responsibility. Over the years, we have designed the device, in each line has made good economic and social benefits. To face the past, we have not met; redouble their efforts towards a higher goal.

You every once envisioned the direction of our efforts, your every requirement, is the basis of our design, your success is our pride and joy!



诚信: 信守承诺, 用心做事  
勤勉: 勤奋学习, 脚踏实地  
合作: 对内倡导沟通, 对外主张互惠, 注重合作, 倡导双赢  
创新: 不断学习, 不断超越, 博采众人, 迎接挑战

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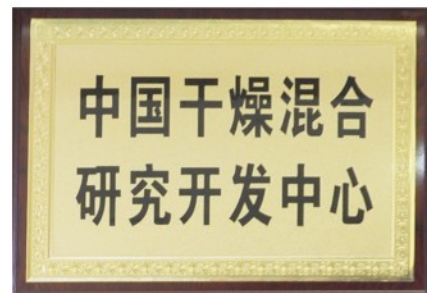
# APTITUDE AND EQUIPMENT

资质与装备

追求完美 永不满足

荣誉源于用心，每份认可的资质证书凝聚豪迈奋力拼搏的结晶。

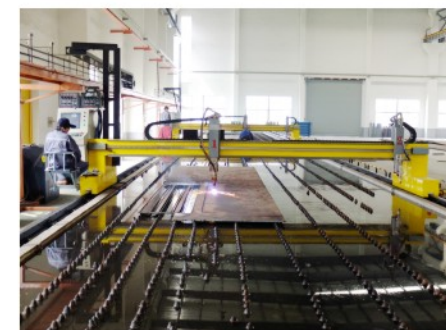
Honor results from diligence. Each approbatory professional certificate is the fruit of dikignce and perseverance for Haomai.



卓越，源于对品质的不懈追求

Excellence, from the quality of unremitting pursuit

豪迈拥有各种先进设备，旋转闪蒸干燥机，离心喷雾干燥设备，振动流化床干燥机等，建立了完善的体系，确保产品质量。  
The match is virtuous force has all kinds of advanced detection equipment, specializes in spin flash dryers, centrifugal spray drying equipment, vibrating fluid bed dryers and other equipments to ensure that the quality of products.



# HONOR AND QUALIFICATION

荣誉资质

## 追求完美 永不满足

Pursue perfect endlessly

荣誉源于用心，每份认可的资质证书凝聚豪迈奋力拼搏的结晶。荣誉因客户而在，豪迈摒弃了荣誉的表象，真正将其作为激励自身的不竭动力。每份荣誉都是我们的金名片和通行证，那是我们一个个路标，那是我们一次次的历程。

Honor results from diligence. Each approbatory professional certificate is the fruit of dikigence and perseverance for Haomai.Honor exists because of the service for customers.Abandoning semblance,Haomai has taken the honor as continuous inspiration.Praise and honor is not only ourbusiness card and pass card but also out route sign and experience.

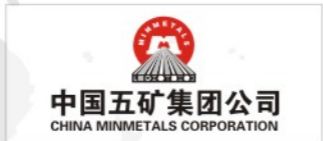


# COOPERATION CASE

## 客户案例

多年来,凭借雄厚的实力/良好的信誉/严格的质量管理以及优质的服务体系,豪迈已成为国内的著名品牌,并赢得了广大用户的一致认可.产品远销至世界各地,并在国内建立了广泛的客户网络.

With the powerful ability,well-known reputation,strict quality managment and top service system,Haomai has been a famous brand in China and is appraised by wide usersafter so many years.Our products are sold well to countries all over the world.we also have established a broad customer network.





# PRODUCT CATALOG

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- 06 **KJG** 系列空心桨叶干燥机 KJG Series Paddle Dryer
- 10 **HZG** 系列回转滚筒干燥机 HZG Series Rotary Dryer
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- 62 **WF-30B** 中草药粉碎机组 WF-30B China Herb High Speed Grinder
- 63 **WF** 最新高效粗粉碎机 WF Roughness Grinder
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- 64 **RLY** 系列燃油、RQY燃气热风炉 RLY/RQY Series Oil Fuel, Gas Fuel Hot Air Furnace
- 65 **JRML** 系列链条炉排燃煤热风炉 JRML Series Coal Furnace Of Chain

## PLG 系列盘式连续干燥机 PLG Series Continual Plate Dryer

### 概述 Descriptions

盘式连续干燥机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、农副产品加工等行业的干燥作业。在各行业使用实践中深受好评。可分为常压、密闭、真空三大类型；1200、1500、2200、3000等各种规格；A(碳钢)、B(接触物料部分不锈钢)、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4~180m<sup>2</sup>，共几百种型号的系列产品，并能提供与之相配套的辅助设备，可满足用户对各种物料进行干燥的需要。



PLG Series Continual Plate Dryer is a kind of high effective conducting and continuous drying equipment. Its unique structure and operating principle determine that it has advantages of high heat efficiency, low energy consumption, small occupying area, simple configuration, easy operating and control as well as good operating environment etc. It can be widely used in drying process in the fields of chemical industry. Pharmaceuticals, agricultural chemicals, foodstuff, fodder, process of agricultural and sideline products etc, and is well received by various sectors in their practical usage. Now there are three big categories, named normal pressure, closed and vacuum styles; 1200, 1500, 2200 and 3000 sizes and so on; and three kinds of materials, namely A(carbon steel), B(stainless steel used for those all parts where materials are contacted) and C(on the basis of B to add stainless steel materials for vapor pipes, main shaft and support, and stainless steel linings for cylinder body and top cover). With a drying area being from 4 to 180 square metres, now we have hundreds of models of series products and various kinds of auxiliary devices available to meet requirements of drying materials for customers.



### 应用 Applications

干燥 热解 煅烧 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 系列盘式连续干燥机 PLG Series Continual Plate Dryer

### 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.每层干燥盘皆可通入热介质或冷介质、对物料进行加热或冷却，物料受热均匀，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，传送物料的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的清洗和观察。

#### (三) 能耗低

- 1.料层很薄，主轴转速低，物料传送系统需要的功率小、电耗少。
- 2.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下高低，粉尘很难浮到设备顶部，所以顶部排湿口排出的尾气中几乎不含有粉尘。
- 2.密闭型：配备溶剂回收装置，可方便地回收在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's arm, 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 accurate and easy.
3. Dwell time of materials can be accurately adjusted.
4. Single flowing direction of materials without return flowing and mixing, uniform drying and stable quality, no re-mixing is required.

#### (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

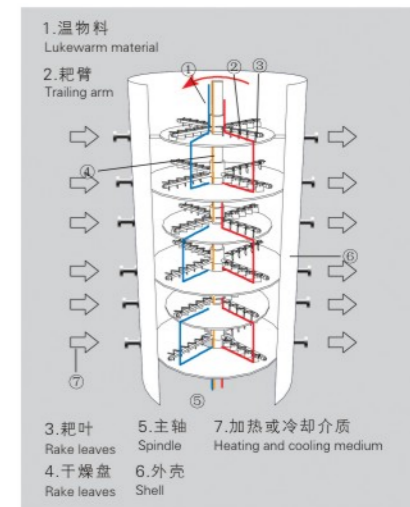
1. Thin layer of materials, low speed of main shaft, small power and energy required for conveying system of materials.
2. Dry by conducting heat so it has high heating efficiency and low energy consumption.

#### (4) Good operation environment, solvent can be recovered and powder discharge meet the requirements 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 port 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 in order for safe operation. Especially suitable for drying of 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.

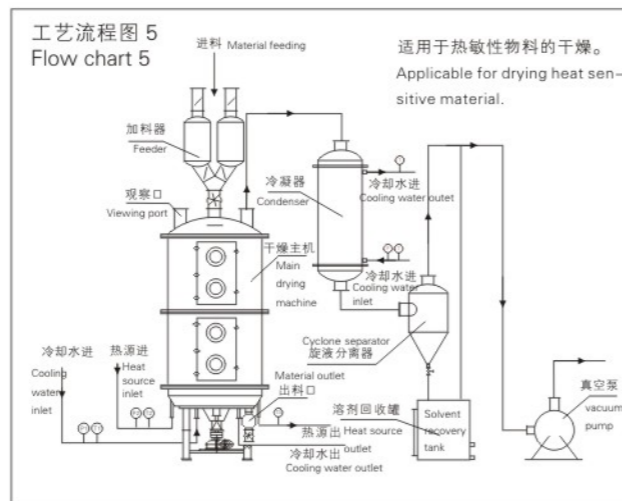
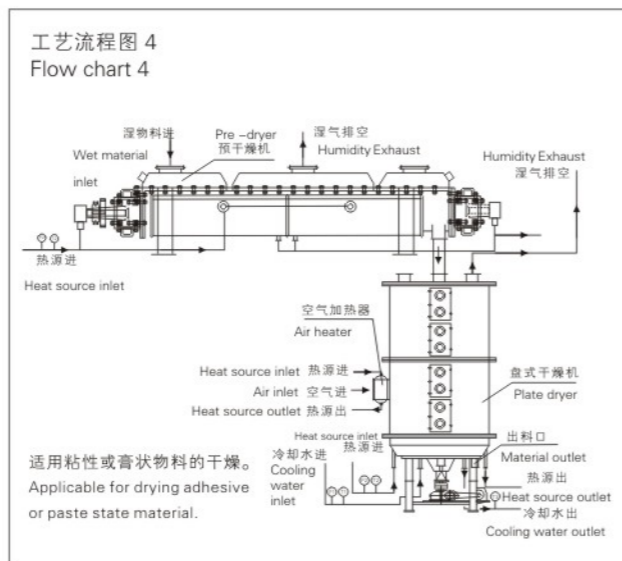
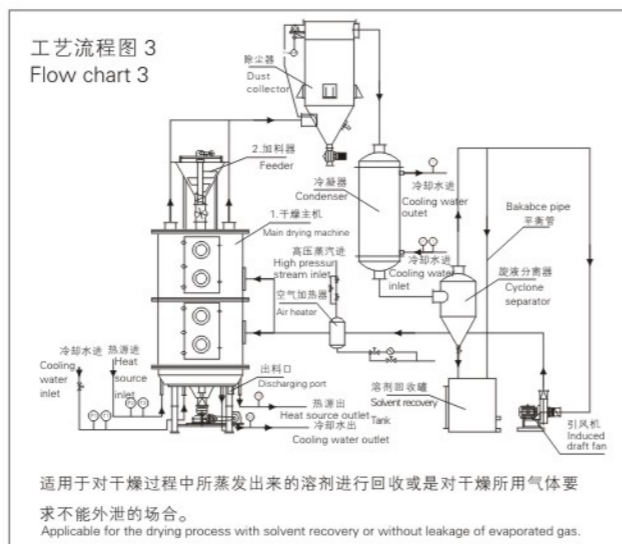
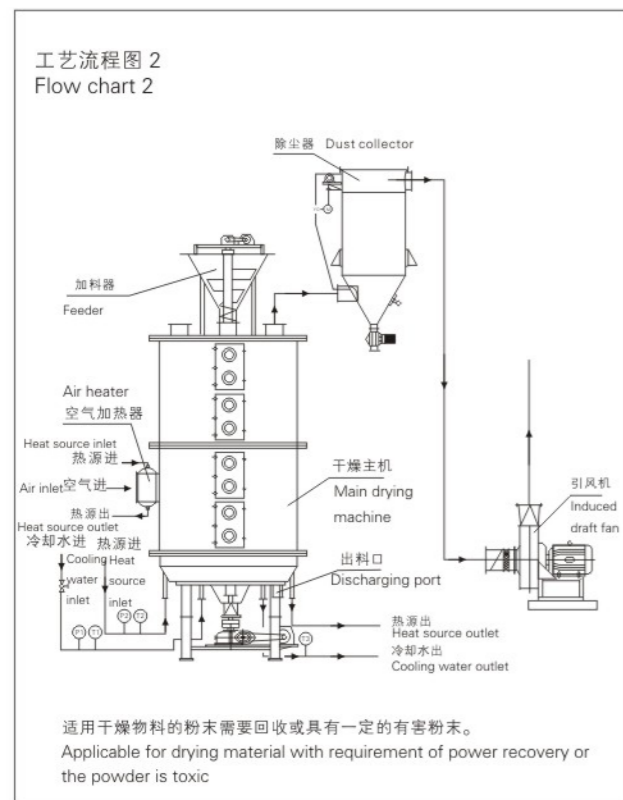
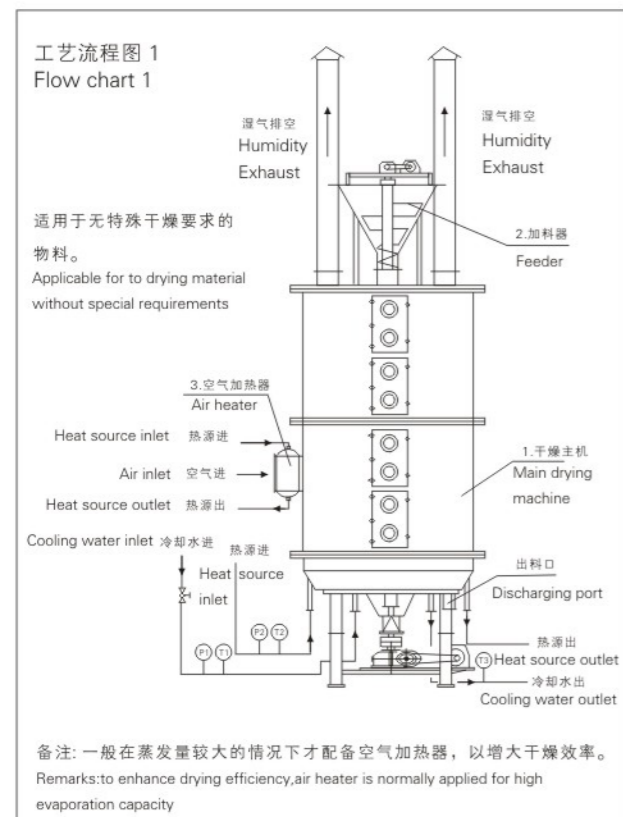
1. As the dryer is in a whole for delivery, it is quite easy to install and fix at site only by hoisting.
2. As drying plates being arranged by layers and installed vertically, it takes a small occupying area though drying area is large.





## PLG 系列盘式连续干燥机 PLG Series Continual Plate Dryer

### 流程图 Flow chart



## PLG 系列盘式连续干燥机 PLG Series Continual Plate Dryer

### 技术特性 Features of technology

#### (一) 干燥盘

- 1.设计压力: 一般为0.4MPa, 最大可达1.6MPa。
- 2.最高使用压力: 一般 $\leq 0.4$ MPa, 最高可达1.6MPa。
- 3.加热介质: 蒸汽、热水、导热油、干燥盘温度100℃时使用热水加热, 100℃~150℃时用 $\leq 0.4$ MPa饱和水蒸汽或者过热蒸汽加热, 150℃~320℃时用导热油加热。

#### (二) 物料传送系统

- 1.主轴转速: 1~10转分, 电磁或变频无极调速。
- 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, 能随盘面上上下浮动保持接触, 有多种形式。
- 4.碾滚: 对易结块和需要粉碎的物料, 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: 圆筒或八棱柱型, 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: 圆筒型壳体, 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: 圆筒型壳体, 设计压力为-0.096Mpa, 加热介质进出口主管道在壳体内。

#### (四) 空气加热器

一般在配置引风机时使用, 以防潮湿的空气进入主机影响干燥效果。

#### 1. Drying plate

- (1). Designing pressure: general is 0.4MPa, Max. can reach 1.6 Mpa.
- (2). Work pressure: general is less then 0.4Mpa, and Max. can reach 1.6 Mpa.
- (3). Heating medium: steam, hot water, oil. When the drying plates' temperature is 100℃, hot water can be used; when 100℃~150℃, it will be saturated water steam  $\leq 0.4$ Mpa or steam-gas, and when 150℃~320℃, it will be oil.

#### 2. Material transmission system

- (1). Main shaft revoluton: 1~10 rpm, electromagnetism or frequency stepless speed regulating.
- (2). harrow arm: There are 2 to 8 pieces arm that be fixed on the main shaft on each layer.
- (3). Harrow's blade: Spliced on the harrow arms, 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: Cylindrical shell or eight prismatic type, with whole body and split structure. The main pipes of inlets and outlets of heating medium can be inside the shell, or outside 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 -0.096MPa. The main ducts of inlet and outlet is inside of the shell.

#### 4. Air heater:

Normal used with the application of draft fan, incase the wet air enters, to increase drying efficiency.



## PLG 系列盘式连续干燥机 PLG Series Continual 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，在大干燥盘上的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，加热介质形式有饱和蒸汽、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。湿汽从物料逸出，由设在顶盖上的排湿口排出，真空型盘式干燥器的湿汽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 first drying layer on the top of the dryer. They will be turned and stirred by harrow arms when the arm rotates and drop down to the outer edge of the large drying plate along the exponential helical line. On the small drying plate they will be moved to its outer edge and drop down to the outer edge of the large drying plate underneath, and will be moved inward and drop down from its central hole to the small drying plate on the next layer. Both small and large drying plates are arranged alternately so as materials can go through the whole dryer continuously. The heating media, which could be in forms of saturated steam, hot water or heat conducting oil will be led into hollow drying plates from one end to the other end of the dryer. The dried materials will drop from the last layer of the drying plate to the bottom layer of the shell body, and will be moved by rakes to the discharge port. The moisture escapes from materials and will be removed from the moist discharge port on the top cover, or sucked out by the vacuum pump on the top cover for vacuum-type plate dryer. The dried materials discharged from the bottom layer can be packed directly. The drying capability can be raised up if equipped with supplementary devices such as finned heater, condenser for solvent retrieval, bag dust remover, return and mix mechanism for dried materials and drawing fan etc. Solvent in those dried paste and heat sensitive materials can be easily retrieved, and thermal decomposition and reaction can be also carried out.

### 技术参数 Technical parameters

规格 Type	外径 Diameter (mm)	高度 High (mm)	干燥面积 Area of dry (m <sup>2</sup> )	功率 Power (Kw)	规格 Type	外径 Diameter (mm)	高度 High (mm)	干燥面积 Area of dry (m <sup>2</sup> )	功率 Power (Kw)
1200/4	1850	2608	3.3	1.1	2200/18	2900	5782	55.4	5.5
1200/6		3028	4.9		2200/20		6202	61.6	
1200/8		3448	6.6	2200/22	6622		67.7		
1200/10		3868	8.2	2200/24	7042		73.9		
1200/12		4288	9.9	2200/26	7462		80.0		
1500/6	2100	3022	8.0	2.2	3000/8	3800	4050	48	11
1500/8		3442	10.7		3000/10		4650	60	
1500/10		3862	13.4	3000/12	5250		72		
1500/12		4282	16.1	3000/14	5850		84		
1500/14		4702	18.8	3000/16	6450		96		
1500/16	5122	21.5	3.0	3000/18	7050	108	13		
2200/6	2900	3262	18.5	3000/20	7650	120			
2200/8		3682	24.6	3000/22	8250	132			
2200/10		4102	30.8	3000/24	8850	144			
2200/12		4522	36.9	3000/26	9450	156			
2200/14		4942	43.1	4.0	3000/28	10050	168	15	
2200/16	5362	49.3	5.5	3000/30	10650	180			

注：部分参数设计时视不同物料有所调整，以设计为准。

## KJG 系列空心桨叶干燥机 KJG Series Paddle Dryer

常州市豪迈干燥工程有限公司在吸收国内外先进技术的基础上，进行改进、优化设计的楔型空心桨叶干燥机，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、低温煅烧等单元操作。设备中特殊的楔型搅拌传热桨叶，具有较高的传热效率和传热面自清洁功能。

Changzhou HaoMai Drying Engineering Co., Ltd., by absorbing foreign advanced technology, based on to improve and optimize the design of the wedge-shaped hollow paddle dryer can treat paste, granular, powder, paste material through indirect heating or cooling, to achieve drying, cooling, heating, sterilization, reaction, low temperature calcination and other unit operations. Wedge-shaped mixing device in a special heat transfer blade, has a high heat transfer efficiency and heat transfer surface self-cleaning function.



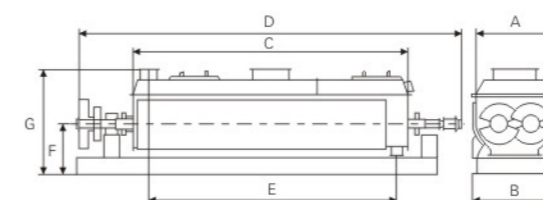
### 概述 Description

空心轴上密集排列着楔型中空桨叶，热介质经空心轴流经桨叶。单位有效容积内传热面积很大，热介质温度从-40℃到320℃，可以是水蒸汽，也可以是液体型：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。热量损失仅为通过器体保温层向环境的散热。楔型桨叶传热面具有自清洁功能。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。桨叶干燥机的壳体为W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，防止物料粉尘外泄及收集物料溶剂蒸汽。出料口处设置一挡板，保证料位高度，使传热面被物料覆盖而充分发挥作用。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。

Densely lined with wedge-shaped hollow shaft hollow blades, heat medium through the hollow axial flow through blades. Unit effective volume of a very large area of heat transfer, heat medium temperature from -40 °C to 320 °C, can be water vapor, may also be liquid-type: such as water, oil and so on. Indirect conduction heating, the air does not carry away the heat, the heat are used to heat materials. Only through the device body heat loss to the environment, heat insulation layer. Wedge-shaped blades with self-cleaning heat transfer surfaces. Wedge-shaped surface material particles and scrubbing effect relative movement, to wash away the wedge surface material attachments, so in operation have maintained a clean heat transfer surfaces. Blade dryer for the W-type shell, the shell of the general arrangements for 2-4 hollow stirring shaft. Shell with a sealed cover with the cover to prevent dust leakage and collection of materials, solvent vapor materials. Set out and exit pull a block, to ensure a high degree of material level, so that heat transfer surface is covered with fully materials. Heat medium through the rotary joint, passing through the shell jacket and the hollow stirring shaft, hollow shaft stirring according to the type of thermal media have different internal structures to ensure the best heat transfer.

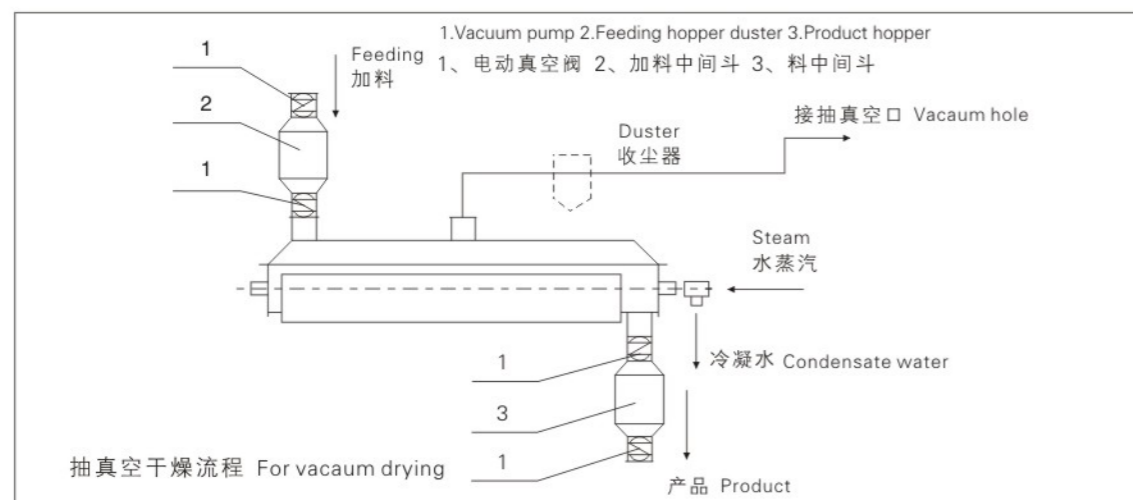
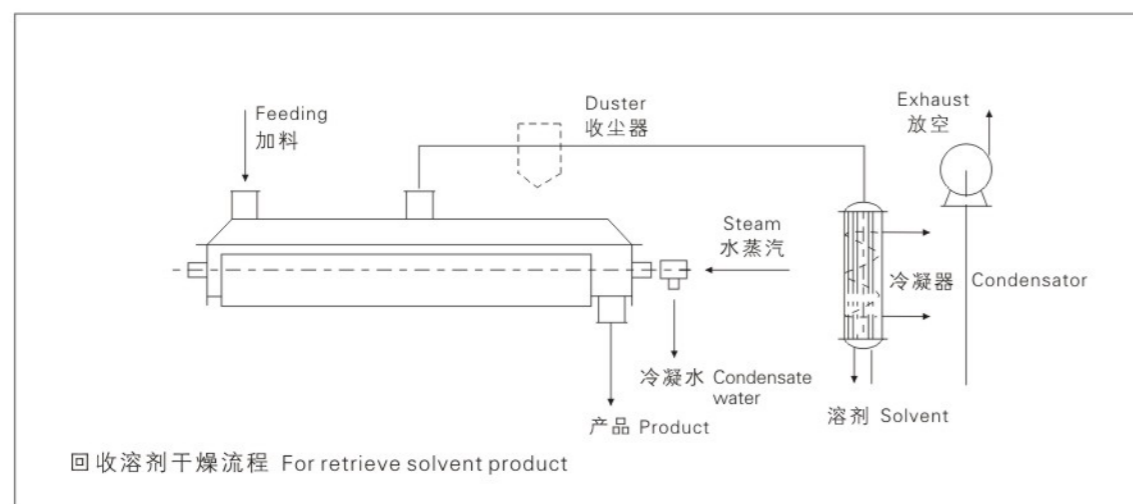
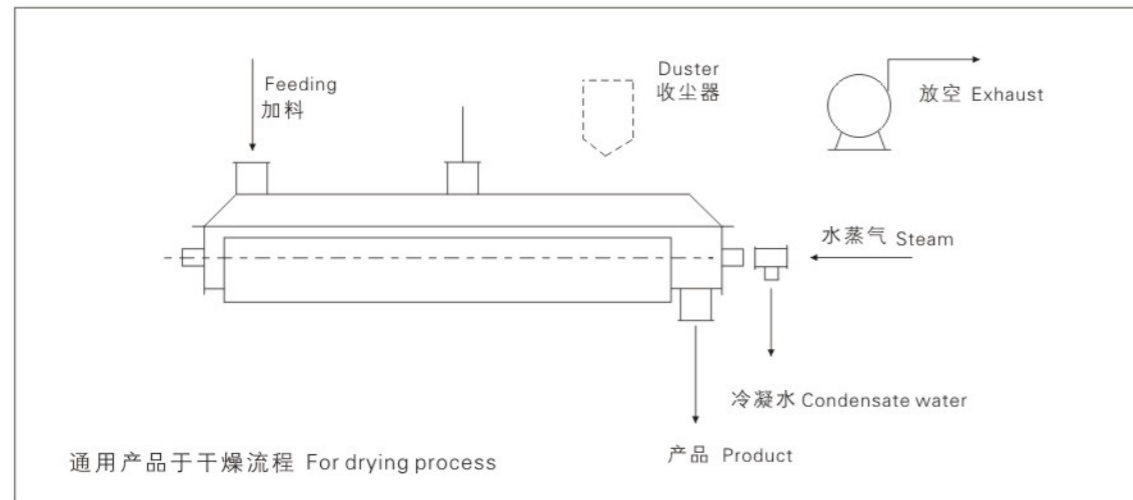


### 结构示意图 Schematic of structure



## KJG 系列空心桨叶干燥机 KJG Series Paddle Dryer

### 流程图 Flow chart



## KJG 系列空心桨叶干燥机 KJG Series Paddle Dryer

### 应用 Application

桨叶干燥机已成功用于食品、化工、石化、染料、工业污泥等领域。设备传热、冷却、搅拌的特性使之可以完成以下单元操作：煅烧（低温）、冷却、干燥（溶剂回收）、加热（融化）、反应和灭菌。搅拌桨叶同时又是传热面，使单位有效容积内传热面积增大，缩短了处理时间。楔型桨叶传热面又具有自清洁功能。压缩—膨胀搅拌功能使物料混和均匀。物料沿轴向成“活塞流”运动，在轴向区间内，物料的温度、湿度、混合度梯度很小。

- 用导热油做热介质，桨叶干燥机可完成低温煅烧工作。如：二水硫酸钙 ( $\text{Ca}_2\text{SO}_4 \cdot 2\text{H}_2\text{O}$ ) 煅烧转化为半水硫酸钙 ( $\text{Ca}_2\text{SO}_4 \cdot 1/2\text{H}_2\text{O}$ )。碳酸氢钠 ( $\text{NaHCO}_3$ ) 经煅烧转化为纯碱 ( $\text{Na}_2\text{CO}_3$ ) 等。
- 通入冷却介质，如水、冷却盐水等即可用来冷却。如：使用于纯碱行业的桨叶式凉碱机，取代老式的空气冷却凉碱机，节省了能源及尾气处理设备，降低了操作费用，还可用于钛白粉、镍铁合金粉及各种粉粒状物料的冷却。在单台机里可以将物料从1000℃冷却到小于40℃。
- 干燥，设备最主要的功能，不使用热空气，使溶剂回收、能源消耗、环境控制处于易处理的理想状态。对需回收溶剂、易燃易爆氧化热敏性物料尤为适应。已广泛用于精细化工、石化、染料行业。
- 轴向区间内，温度、湿度、混合度的均匀性，使得设备可用来加热或融化，或进行一些固体物料反应。在复合肥及变性淀粉行业均已成功使用。桨叶干燥机可用来对食物和面粉进行灭菌处理。单位有效容积内大的加热面积，很快就将物料加热到灭菌温度，避免了长时间加热而改变物料品质。

### 适应物料

石化行业：聚烯烃粉体、聚碳酸酯树脂、高、低密度聚乙烯、线型低密度聚乙烯、聚缩醛颗粒、尼龙6、尼龙66、尼龙12、醋酸纤维、聚苯硫醚、丙烯酸树脂、工程塑料、聚氯乙烯、聚乙烯醇、聚苯乙烯、聚丙烯、聚脂、聚甲醛、苯乙烯~丙烯腈共聚、乙烯~丙烯共聚。

环保行业：PTA污泥、电镀下水污泥、锅炉烟灰、制药厂废渣、糖厂废渣、味精厂废渣、煤灰。

饲料行业：酱油渣、骨基饲料、酒糟、食品下角料、苹果渣、橘子皮、豆粕、鸡骨饲料、鱼粉、饲料添加剂、生物渣泥

食品行业：淀粉、可可豆、玉米粒、食盐、变性淀粉、药品。

化工行业：纯碱、氮磷钾复合肥、高岭土、膨润土、白炭黑、炭黑、磷石膏、氧化氟化钠、硝酸钙、碳酸镁、氟化钠、氢氧化铝、硫酸钡、硫酸钙、碳酸钙、染料、分子筛、皂素。

Blade dryer has been successfully used in food, chemical, petrochemical, dye, industrial sludge and other fields. Heating, cooling, mixing features make it to complete the following unit operations: calcination (low temperature), cooling, drying (solvent recovery), heating (melting), response and sterilization. Mixing blades at the same time the heat transfer surface, the effective volume per unit area of heat transfer increases, reducing the processing time. Heat transfer surfaces in wedge-shaped blades with self-cleaning function. Compression - Expansion mixing features make the material mixed uniformly. Material along the axis into a "plug flow" movement, in the axial zone, the material temperature, humidity, mixing a very small degree of gradient.

- Conducting oil to do with the heat medium, blade dryer to complete the work of low-temperature calcination. Such as: calcium sulfate dehydrate ( $\text{Ca}_2\text{SO}_4 \cdot 2\text{H}_2\text{O}$ ) calcined into calcium sulfate hemihydrate ( $\text{Ca}_2\text{SO}_4 \cdot 1/2\text{H}_2\text{O}$ ). Sodium bicarbonate ( $\text{NaHCO}_3$ ) into calcined soda ( $\text{Na}_2\text{CO}_3$ ) and so on.
- Pass into the cooling medium, such as water, salt, etc. can be used to cooling. Such as: use of soda ash industry in blade-type cooler base machine to replace the old air-cooled cooler base machine, saving energy and exhaust gas processing equipment, lower operating costs, but also for titanium, nickel alloy powder and all kinds of powder granular materials cooling. On a single machine where the material can be cooled from 1000 °C to less than 40 °C.
- Dry, the main function of equipment, do not use hot air to solvent recovery, energy consumption, environmental control is easy to deal with the ideal state. On the need to recover solvents, heat-sensitive materials, particularly flammable adapt easily oxidized. Has been widely used in fine chemical, petrochemical, dye industry.
- Axial range, temperature, humidity, mixing degree of uniformity, so equipment can be used to heating or melting, or some solid material response. In the compound and modified starch industries have been successfully used. Blade dryer can be used to carry out sterilization of food and flour. Unit effective volume with a large heating area, will heat the material to sterilization temperature, to avoid prolonged heating change the quality of materials.

### Adaptation of materials

Petrochemical Industry: polyolefin powder, polycarbonate resin, high and low density polyethylene, linear low density polyethylene, polyacetal particles, nylon 6, nylon 66, nylon 12, cellulose acetate, polyphenylene sulfide, propylene base resin, engineering plastics, polyvinyl chloride, polyvinyl alcohol, polystyrene, polypropylene, polyester, polyoxymethylene, styrene ~ Acrylonitrile, ethylene propylene copolymer ~.

Environmental protection industry: PTA sludge, electroplating sludge into the water, boiler ash, pharmaceutical waste, sugar residue, glutamate factory waste, coal ash.

Feed Industry: soy sauce residue, bone-based feed, grains, food Scraps, apple, orange peel, soybean meal, chicken feed, fish meal, feed additives, bio-sludge

Food industry: starch, cocoa beans, corn kernels, salt, modified starch, pharmaceuticals.

Chemical industry: soda ash, NPK fertilizer, kaolin, bentonite, white carbon black, carbon black, phosphorus gypsum, oxidation of sodium fluoride, calcium nitrate, magnesium carbonate, sodium cyanide, aluminum hydroxide, barium sulfate, sulfuric acid, calcium carbonate, dyes, molecular sieve, saponin.

## KJG 系列空心桨叶干燥机 KJG Series Paddle Dryer

### 特点 Features

- 桨叶干燥机能耗低: 由于间接加热, 没有大量携带空气带走热量, 干燥器外壁又设置保温层, 对浆状物料, 蒸发1kg水仅需1.22kg水蒸汽。
- 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, 设备尺寸变小。就极大地减少了建筑面积及建筑空间。
- 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。
- 环境污染小: 不使用携带空气, 粉尘物料夹带很少。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情况, 可采用闭路循环。
- 操作费用低: 该设备正常操作, 仅1-2人/天。低速搅拌及合理的结构。磨损量小, 维修费用很低。
- 操作稳定: 由于楔形桨叶特殊的压缩-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。
- Blade dryer energy consumption is low: as indirect heating, the air does not carry away a lot of heat insulation of dryer wall has, on the slurry material, evaporation of 1kg of water vapor only 1.22kg of steam.
- Blade dryer system costs low: within the effective volume of units have a large heat transfer surface, the reduced processing time, equipment size becomes smaller. Would greatly reduce the building area and building space.
- Dealing with a wide range of materials: using a different hot medium, able to deal with heat-sensitive materials can be heat-treated materials handling. Commonly used media are: water, steam, oil, hot water, cooling water. Continuous operation can also be intermittent operation can be applied in many fields.
- Environmental pollution: do not carry air, dust entrainment few materials. Solvent evaporation of material is very small, easy to handle. To have contaminated materials or be recycled solvent conditions, can be used closed circuit.
- Low operating cost: the equipment normal operation, 1-2 persons/day. Low speed and reasonable structure. Wear a small, very low maintenance costs.
- Operation stability: As the wedge-shaped blades of special compression - expansion of stirring, so that material particles sufficient surface contact with the heat transfer in the axial zone, the material temperature, humidity, mixed density gradient is very small, thus ensuring the process stability.

### 技术参数 Technical parameters

型号	KJG-2.7	KJG-9	KJG-13	KJG-18	KJG-24	KJG-29	KJG-36	KJG-41
传热面积m <sup>2</sup> heat transfer area	2.7	9	13	18	24	29	36	41
有效容积m <sup>3</sup> effective volume	0.06	0.32	0.59	1.09	1.53	1.85	2.42	2.8
转速范围r.p.m revolution	15-30	10-25	10-25	10-20	10-20	10-20	10-20	10-20
功率kw power	2.2	3.8	5.5	7.5	11	11	15	15
器体宽A mm width of dryer body	306	584	762	940	1118	1118	1296	1296
总宽B mm total width	736	841	1066	1320	1474	1474	1676	1676
器体长C mm length of dryer body	1956	2820	3048	3328	3454	4114	4115	4724
总长D mm total length	2972	4876	5486	5918	6147	6808	6960	7570
进出料距E mm Distance between feeding and discharging	1752	2540	2768	3048	3150	3810	3810	4420
中心高F mm height in center	380	380	534	610	762	762	915	915
总高G mm total height	762	838	1092	1270	1524	1524	1778	1778
进汽口N steam inlet	(2)3/4	(2)3/4	(2) 1	(2) 1	(2) 1	(2) 1	(2) 1	(2) 1
出水口O water outlet	(2)3/4	(2)3/4	(2) 1	(2) 1	(2) 1	(2) 1	(2) 1	(2) 1

型号	KJG-48	KJG-52	KJG-62	KJG-68	KJG-73	KJG-81	KJG-87	KJG-95	KJG-110
传热面积m <sup>2</sup> heat transfer area	48	52	62	68	73	81	87	95	110
有效容积m <sup>3</sup> effective volume	3.54	3.96	4.79	5.21	5.78	6.43	7.39	8.07	9.46
转速范围r.p.m revolution	10-20	10-20	10-20	10-20	5-15	5-15	5-15	5-15	5-10
功率kw power	30	30	45	45	55	55	75	75	95
器体宽A mm width of dryer body	1474	1474	1651	1652	1828	1828	2032	2032	2210
总宽B mm total width	1854	1854	2134	2134	2286	2286	2438	2438	2668
器体长C mm length of dryer body	4724	5258	5410	5842	5461	6020	5537	6124	6122
总长D mm total length	7772	8306	8865	9296	9119	9678	9119	9704	9880
进出料距E mm Distance between feeding and discharging	4420	4954	4953	5384	5004	5562	5080	5664	5664
中心高F mm height in center	1066	1066	1220	1220	1220	1220	1220	1220	1220
总高G mm total height	2032	2032	2362	2362	2464	2464	2566	2566	2668
进汽口N steam inlet	(2)11/2	(2)11/2	(2)11/2	(2)11/2	(2)11/2	(2)11/2	(2)2	(2)2	(2)2
出水口O water outlet	(2)11/2	(2)11/2	(2)11/2	(2)11/2	(2)11/2	(2)11/2	(2)2	(2)2	(2)2

注: 部分参数设计时视不同物料有所调整, 以设计为准。

## HZG 系列回转滚筒干燥机 HZG Series Rotary Dryer



### 概述 Descriptions

湿物料从干燥机一端投入后, 在内筒均布的抄板器翻动下, 物料在干燥器内均匀分布与分散, 且与并流(逆流)的热空气充分接触, 加快了干燥传流、传质推动力。在干燥过程中, 物料在带有倾斜的抄板和热气流作用下, 可调控地运动至干燥机另一端星形卸料阀排出成品。

When the damp raw material is fed from one terminal, it is turned over through blades that are distributed inside the cylinder and will be distributed uniformly in the drier and contact fully with the countercurrent hot air. In this way, the process of heat conduction is increased. During the period of dry, under the effect of incine blades and hot air stream, raw material can be moved to the star section of drier and discharged from discharging valve.

### 应用 Applications

适用于

1. 化工、矿山、冶金等行业大颗粒, 比重大物料干燥, 如: 矿山、高炉矿渣、煤、金属粉末、磷肥、硫铵。
2. 对有特殊要求的粉状、颗粒状物料的干燥, 如: Hp发泡剂、酒糟渣、轻质碳酸钙、活性白土、磁粉、石墨、药渣。
3. 要求低温干燥, 且需大批量连续干燥的物料。

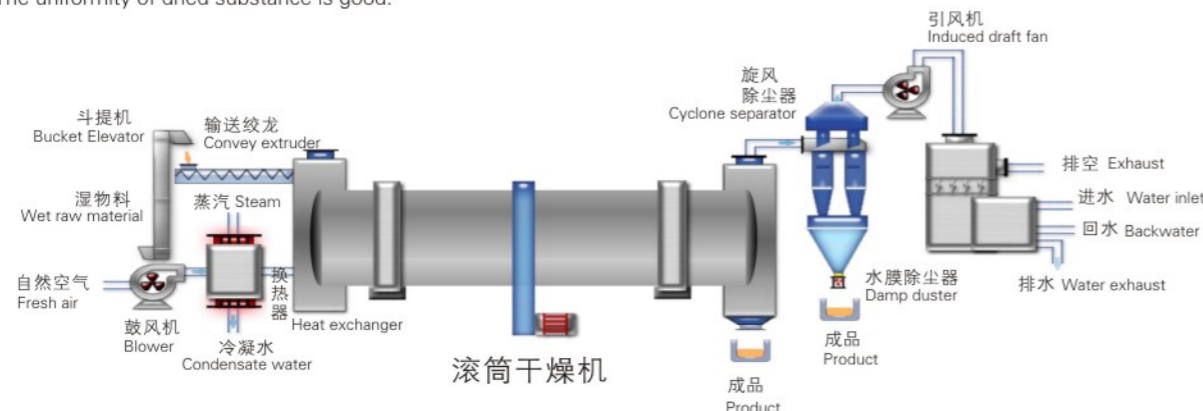
Applicable for drying big particles, heavy particles in chemical, mining, and metallurgy, such as mining area, cinder of blast furnace, coal, powder of metal, phosphate fertilizer and thiamine. For drying the powder or particles with special requirements, such as HP foaming blowing agent, residue of alcohol, light calcium carbonate, active clay, magnetic powder, graphite, and residue of medicine. For materials to be dried under low temperature and large lot continuous production.



## HZG 系列回转滚筒干燥机 HZG Series Rotary Dryer

### 特点 Features

- 转筒干燥器机械化程度高，生产能力较大。
- 流体通过筒体阻力小，功能消耗低。
- 对物料特性的适应性比较强。
- 操作稳定，操作费用较低，产品干燥的均匀性好。
- High in the extent of mechanization and strong in production capacity.
- The resistance for fluid passing through the cylinder is small. The consumption of power and energy is low.
- It has strong adaptability to the properties of raw material. The operation is stable. The cost of operation is cheap.
- The uniformity of dried substance is good.



### 技术参数 Technical parameters

型号 model	直接加热顺流式 direct heating clockwise flow spec	直接加热顺流式 direct heating clockwise flow spec	直接加热逆流式 heat directly countercurrent spec	直接加热逆流式 heat directly countercurrent spec	复合加热 complex heat	复合加热 complex heat
物料种类 kinds of raw material	矿石 ore	HP发泡剂 vesicant	高炉矿渣 slag of blast furnace	硫酸铵 ammonium sulphate	磷肥 phosphorus fertilizer	煤 coal
处理量 amount to be treated(Kg/h)	1000	466	15000	20000	12000	5000
初含水量 primary moisture(%)	30	13	6	1.5	5	6.5
终含水量 final moisture(%)	15	0.3	1	0.1	0.1	0.1
平均粒径 average diameter(mm)	6.5	0.05	4.7	0.5-0.7	0.5	5
物料堆积重度 bulk density of rawmaterial kg/m <sup>3</sup>	770	800	1890	1100	1500	750
热风 amount of hot air (m <sup>3</sup> /kg)	39000	5400	10750	9800	6500	16000
入口空气温度 temperature of air at inlet(°C)	600	165	500	180	650	570
物料出口温度 temperature of raw material at outlet(°C)		42	100	70	80	75
加热方式 way of heating	煤气 gas	蒸气式电加热 electric heating	重油 heavy oil	燃煤热风炉 coal fuel hot air furnace	重油 heavy oil	重油 heavy oil
装料系数 loading efficiency(%)		6.3	7	7.5	7.8	18
转速 revolution(r.p.m)	4	4	3.5	3	4	2
倾斜度 gradient(m/m)	0.04	0.005	0.03	0.05	0.05	0.043
抄板数目 quantity of stirring-up rake	12	24	12	22	内筒外面8外筒内面16 outer of inner cylinder8 inner of outer cylinder16	6 12
干燥器直径 diameter of dryer(m)	2.0	1.5	2	2.3	外筒2内筒0.84 outer cylinder2 inner cylinder0.84	外筒2.4内筒0.95 outer cylinder2.4 inner cylinder0.95
干燥器长度 length of dryer(m)	20	12	17	15	10	16
驱动功率 driving power(kw)	22	7.5	15	11	11	15

注：部分参数设计时视不同物料有所调整，以设计为准。

## 转筒煅烧设备 Drum Calcining Equipment



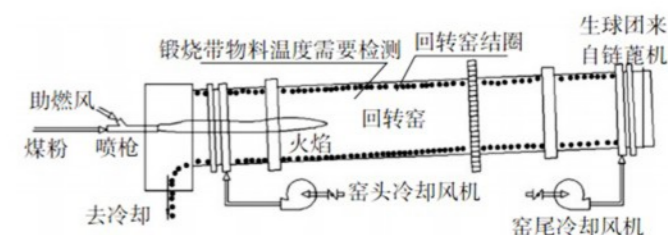
### 概述 Descriptions

在催化剂生产过程中，煅烧设备/煅烧机装备是关系到产品质量的关键设备，特别是对于颗粒状产品例如：氧化铝、三氧化二铝产品的煅烧，要求颗粒不能破坏、煅烧均匀、温差要小，常州市豪迈干燥工程有限公司开发的转筒煅烧设备/煅烧机是一种理想的煅烧装置。

在热源配置方面，使用天然气、煤气比较好控制，温差小，比电加热大大节省成本。

In catalyst production process, burning equipment/burning machine equipment is the key equipment is related to the quality of the products, especially for granular products such as: calcined alumina, 3 oxidation 2 aluminium products, uniform particles could not be broken, calcination, temperature difference is smaller, the changzhou halma drying engineering co., LTD. Development of drum calcining equipment/burning machine is an ideal burning device.

In terms of heat source configuration, better use of natural gas, coal gas control, temperature difference is small, than the electric heating cost greatly.



### 原理 Principle

需燃烧处理的物料自窑头料斗经喂料机构均匀给入窑筒体内，在传动装置的带动下，物料随筒体的转动而沿筒体轴向前进，抄板翻转物料、使其煅烧均匀。筒体外侧设有烧煅室。煅烧产生的热量通过筒体传给物料，物料在高温下进行焚化、分解、干燥、煅烧和焙烧。煅烧好的卸料系统的卸料阀排出，经处理后排出或循环使用。

The combustion processes of material from the kiln head hopper by feeding body evenly into the kiln cylinder body, the gear drive, the material of the rotating cylinder with and move forward along the cylinder axis, copy board flip material, make its calcined uniform. Cylinder lateral with calcined burning chamber. Calcining heat through the cylinder to the material, material incineration, decomposition at high temperature, drying, calcination and roasting. Calcination good unloading system of unloading valve discharge, and treated the back or recycled.

## 转筒煅烧设备 HZG Series Rotary Dryer

### 结构形式 Structural style

煅烧回转主要由燃烧系统、控制系统、筒体、窑体、驱动装置、喂料和卸料系统等六部分组成。所有的部件都安装在由钢结构制作的整体框架上。

燃烧系统主要由烧咀、比例调节阀、电磁阀、电动执行机构、雾化助燃装置、点火装置等构成。

筒体带有链轮或齿轮，两端由托辊支撑，由变频电机通过链轮或齿轮带动。筒体材料可根据工艺要求选用不同的材料。内设抄板。窑体座落在钢架上，主要由轻质保温材料砌筑而成。采用优质折叠块，含锆陶瓷棉毯，减少蓄热量。由耐火材料和筒体的挡火环共同组成迷宫式密封。

驱动装置可采用链传动和齿轮传动，减速机有两出轴，可增设手动装置，以便紧急情况下摇动筒体保护其不被损坏。

喂卸料系统，主要由喂料斗、喂料螺旋、搅拌装置、喂料罩等组成。

Calcination rotary is mainly composed of combustion system and control system, barrel, kiln body, driving device, feeding and discharging system and so on six parts. All the components are installed on the made the overall framework of steel structure.

Combustion system is mainly composed of burning nozzle, proportional valve, solenoid valve, electric actuator, atomization combustion device, ignition device, etc.

Cylinder with sprocket or gear, both ends is supported by roller, driven by frequency modulation motor through the sprocket or gear. Shell material can be selected according to the technological requirements of different materials. With copy board. Kiln body is located on the steel frame, mainly made from a lightweight insulation materials masonry. High quality folding, containing zirconium ceramics cotton blanket, reduce heat storage. Of the fire damper cylinder by refractory and labyrinth seal ring joint.

Drive device can adopt chain and gear transmission, reducer, two axis, can add manual device, so that an emergency shaking cylinder protect it from damage.

Hello unloading system, mainly composed of feed hopper, feed screw, stirring device, feeding cover, etc.

### 特点 Features

- 可灵活地调节控制燃烧温度、燃烧气氛、燃烧时间，更好地适应工艺要求。
- 在高温下使用特殊的筒体材料，最高使用温度可达 1150℃。
- 可方便、灵活地调整窑体倾角和筒体转速。
- 系统操作采用全自动控制，保证生产的连续稳定和有效保护筒体。
- 洁净燃烧，达到环保排放标准。热源可来源于天然气、液化气、焦炉煤气、发生炉煤气、轻柴油和电等。
- Low can be adjusted flexibly control the combustion temperature and combustion atmosphere, burning time, better adapt to the technological requirement.
- Low use special cylinder material at high temperature, the highest temperature can reach 1150℃.
- Low but, flexible and convenient to adjust the kiln body tilt and the cylinder speed.
- Low system adopts full automatic control operation, ensure the production of continuous stability and effectively protect the cylinder.
- Clean combustion, achieve environmental protection standards. Heat source can be derived from natural gas, liquefied gas, coke oven gas and producer gas, light diesel oil and electricity, etc.

### 主要规格 The main specifications

煅烧回转窑的设计需要根据煅烧气氛、煅烧产量等工艺参数确定。

Calcination rotary kiln design needs according to the process parameters such as calcination atmosphere, calcined yield to decide.

## HG 系列滚筒刮板干燥机 HG Series Cylinder and Scratch Board Dryer



### 原理 Principle

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，使料膜中的湿得到蒸发、脱湿、使含湿分的物料得到干燥。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，通过螺旋输送机将干物料集中、包装。

It is inner heating conductive drying equipment; the wet materials gain the heating from the wall of the roller to dehydrate the water. The heating is transferred from the inner roller wall to the outer wall and then goes through the film. The thermal efficiency is very high, so it can be continuously operated. It is widely used for drying liquid or paste materials.

### 结构形式 Structural style

可分为二种形式：单筒，双筒干燥机，另外也可按操作压力分常压和负压两种形式。

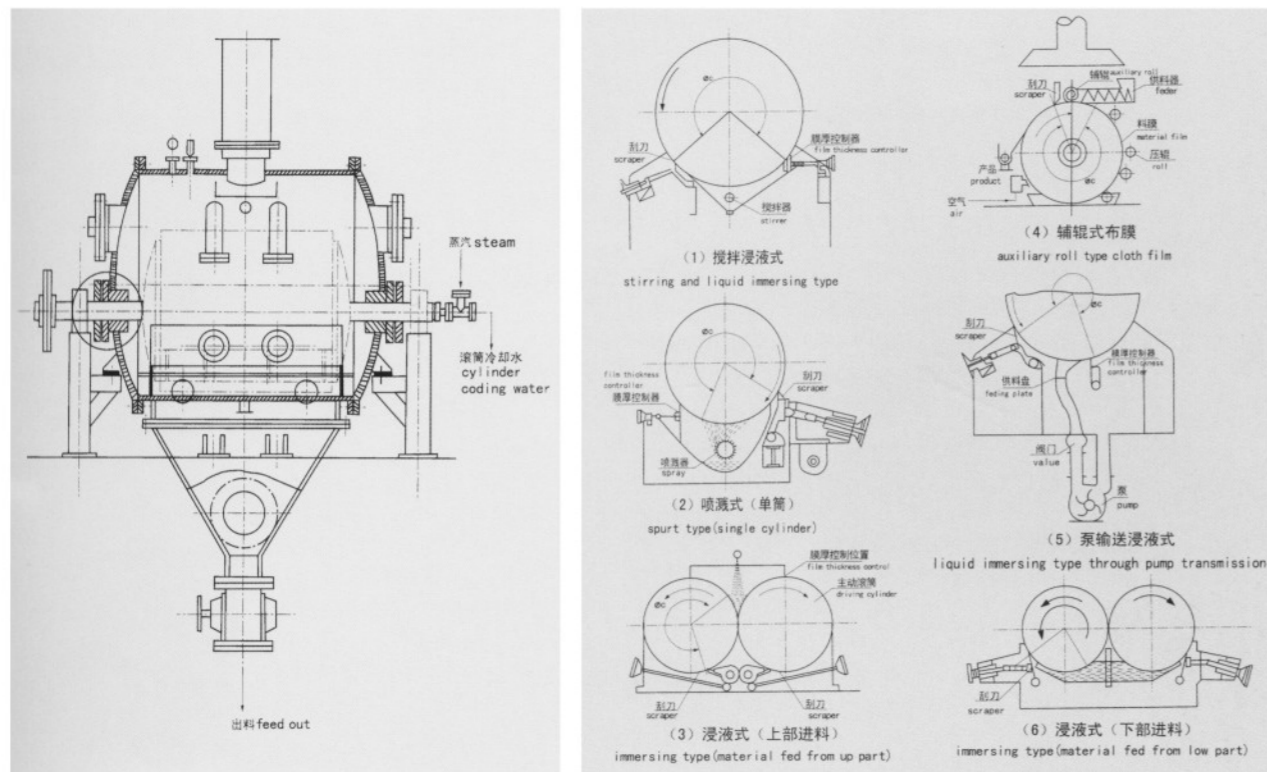
May divided into two forms: the single tube, double drum dryer, also may according to the operating pressure points, normal pressure and decompression in two forms.

### 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，其余热量全部都用于筒料膜湿分的蒸发上，热效率可达80%-90%。
- 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的方便，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10-15秒，在适合于热敏性物料。若将滚筒干燥机设置在真空中，则可在减压条件下运行。
- 干燥速率大。由于涂料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30-70kg.H<sub>2</sub>O/m<sup>2</sup>.h的蒸发强。
- High thermal efficiency. Because of drum dryer heat transfer mechanism of heat transfer, heat transfer direction is consistent throughout the operating cycle, in addition to the heat dissipation and heat loss, all of the remaining heat used for tube materials on the membrane evaporation of moisture, thermal efficiency can reach 80% -90%.
- Large elasticity of operation, and wide applicability. The adjustable roller drier many drying factors. Such as the concentration of the feed, the thickness of the coating material, the temperature of the heating medium, rotating speed of drum etc, can change the drum dryer drying efficiency, and many factors mutual involvement. This drum drying operation to bring a lot of convenient, make it can adapt to a variety of dry materials and different production requirements.
- The drying time is short. The drying period of materials is normally 10 to 15 seconds, suitable for heat-sensitive materials. If set the roller drier in vacuum, can run under the condition of reduced pressure.
- Fast drying rate. Due to the membrane material of coating put on in the wall is thin, generally in 0.3-1.5 mm, and the heat transfer and mass transfer in the same direction, material of membrane surface can keep the 30-70 kg. H<sub>2</sub>O/m<sup>2</sup>.h

## HG 系列滚筒刮板干燥机 HG Series Cylinder and Scratch Board Dryer

## ZLG 系列振动流化床干燥机 ZLG Series Vibration Fluidized Bed Dryer



## 应用 Application

HG系列滚筒干燥机广泛用于食品、化工、医药等行业粘性、膏糊状物料制片、干燥等工序。Such processes as the HG series cylinder desiccator is used in such trades as the food, chemical industry, medicine, etc. viscosity, lotion pastel supplies film-making, dry extensively.

## 技术参数 Technical parameters

规格 Model size	滚筒尺寸 Sizes of Cylinder Diameter×Length (mm)	有效加热面积 Effective Heating Area(m <sup>2</sup> )	干燥能力 Drying capacity (Kg/h)	蒸汽耗量 Steam Consumption(kg/h)	电机功率 Power of Motor (kw)	外形尺寸 Sizes L×W×H (mm)	重量 Weight (kg)
HG-600	Φ600×800	1.12	40-70	100-175	2.2	1700×800×1500	850
HG-700	Φ700×1000	1.65	60-90	150-225	3	2100×1000×1800	1210
HG-800	Φ800×1200	2.26	90-130	225-325	4	2500×1100×1980	1700
HG-1000	Φ1000×1400	3.30	130-190	325-475	5.5	2700×1300×2250	2100
HG-1200	Φ1200×1500	4.24	160-250	400-625	7.5	2800×1500×2450	2650
HG-1400	Φ1400×1600	5.28	210-310	525-775	11	3150×1700×2800	3220
HG-1600	Φ1600×1800	6.79	270-400	675-1000	11	3350×1900×3150	4350
HG-1800	Φ1800×2000	8.48	330-500	825-1250	15	3600×2050×3500	5100
HG-1800A	Φ1800×2500	10.60	420-630	1050-1575	18.5	4100×2050×3500	6150

## 概述 Descriptions

ZLG振动流化床干燥机广泛适用于化工、轻工、医药、食品、塑料、粮油、矿渣、制盐、糖等行业的粉料颗粒状物料的干燥、冷却、增湿等作业。The drier is suitability in chemical industry, light industry, pharmaceutical, food, plastic, oil, slag, salt, sugar and so on, for drying, cooling and wetting.

## 原理 Principle

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同湿料换热后，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。

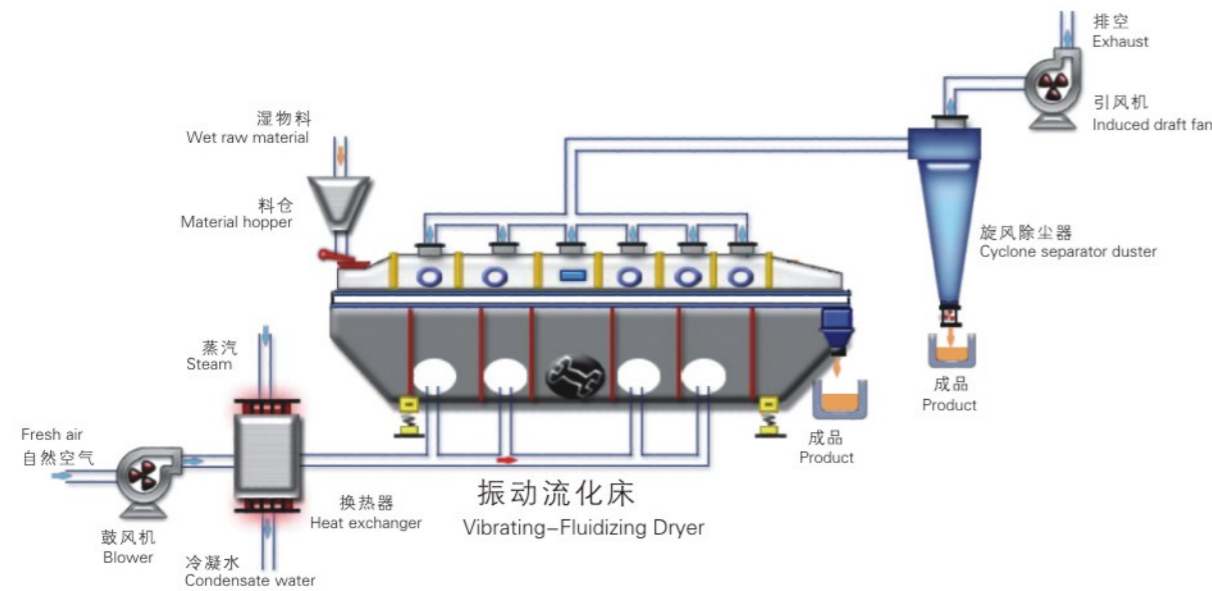
Raw material is fed into the machine and moves forward continuously along with the level of fluidized-bed under the action of vibration. The hot air passes through fluidized-bed and carries out heat exchange with damp raw material. Then the damp air is exhausted out through cyclone separator and the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

## 特点 Features

- 振动源是采用振动电机驱动,运转平稳,维修方便,噪音低,寿命长,维修方便。
- 热效率高,比一般干燥装置可节能30%以上。床层温度分布均匀,无局部过热现象,流态化匀称,无死角现象。
- 可调性好,适应面宽。料层厚度和在机内移动速度以及全振幅变更均匀可实现无级调节。
- 对物料表面的损伤小,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。
- 采用全封闭式结构,有效地防止了物料与空气交叉感染作业环境清洁。
- 当用于高水分物料大批量生产时,可采用多台串联的方式以达到用户要求(典型物料:如聚丙烯酰胺等)。
- The vibration created by motor is stable in operation and convenient in maintenance, low noise and long life.
- High efficiency, 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%.
- It is good in regulation and wide in suitability. The thickness of raw material layer and movable speed inside the machine and the amplitude can be adjusted through continuous variable speed.
- 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 have irregular shape.
- A fully enclosed structure, effectively prevent the material and the air space between the cross infection of the working environment clean.
- You can string multi-serial to raise capacity of raw materials, if the raw material contain high moisture such as polyacrylamide.

ZLG 系列振动流化床干燥机 ZLG Series Vibration Fluidized Bed Dryer

流程图 Flow chart



技术参数 Technical parameters

机型 Model	流化床面积 Area of fluidized-bed (M <sup>2</sup> )	进风温度 Temperature of inlet air (°C)	出风温度 Temperature of outlet (°C)	蒸发水份能力 Capacity to vapor moisture(kg/h)	振动电机 Vibration motor	
					型号 Model	功率 Power kw
ZLG3×0.30	0.9	70~140	40~70	20~35	YZS8-6	0.75×2
ZLG4.5×0.30	1.35			35~50	YZS10-6	0.75×2
ZLG4.5×0.45	2.025			50~70	YZS15-6	1.1×2
ZLG4.5×0.60	2.7			70~90	YZS15-6	1.1×2
ZLG6×0.45	2.7			80~100	YZS15-6	1.1×2
ZLG6×0.60	3.6			100~130	YZS20-6	1.5×2
ZLG6×0.75	4.5			120~170	YZS20-6	1.5×2
ZLG6×0.9	5.4			140~170	YZS30-6	2.2×2
ZLG7.5×0.6	4.5			130~150	YZS30-6	2.2×2
ZLG7.5×0.75	5.625			150~180	YZS40-6	3.0×2
ZLG7.5×0.9	6.75			160~210	YZS40-6	3.0×2
ZLG7.5×1.2	9.0			200~280	YZS50-6	3.7×2
ZLG7.5×1.5	11.25			230~330	YZS50-6	3.7×2
ZLG8×1.8	14.4			290~420	YZS75-6	5.5×2

注：部分参数设计时视不同物料有所调整，以设计为准。

XSG 系列快速旋转闪蒸干燥机 XSG Series Spin Flash Dryer



概述 Descriptions

XSG系列旋转闪蒸干燥机是我厂在引进、吸收国外先进技术的基础上，自行开发成功的新型干燥设备。该机技术先进，设计合理，结构紧凑，适用范围广，生产能力大，产品质量好，效率高，节能，在一个设备内干燥、粉碎、筛分一次性完成，消除环境污染，整机性能达到国际先进水平。

XSG series revolving flash vaporization dryer is a new-type dry equipment developed and introduced by our company, by absorbing the advanced technology abroad. This machine is with modern techniques, the design is rational, the structure is compact, suitable and in extensive range, production capacity is big, the products are of high quality, with high efficiency, low energy. The drying, crushing, sieving can be completed in one equipment, dispelling the environmental pollution, the performance of the complete machine reaches the advanced technology of the world.

原理 Principle

热空气由入口管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、摩擦而被微粒化，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，在上升过程中进一步干燥。由于气固两相作旋转流动，固相惯性大于气相，固气两相间的相对速度较大，强化两相间的传质传热，所以该机生产强度高。

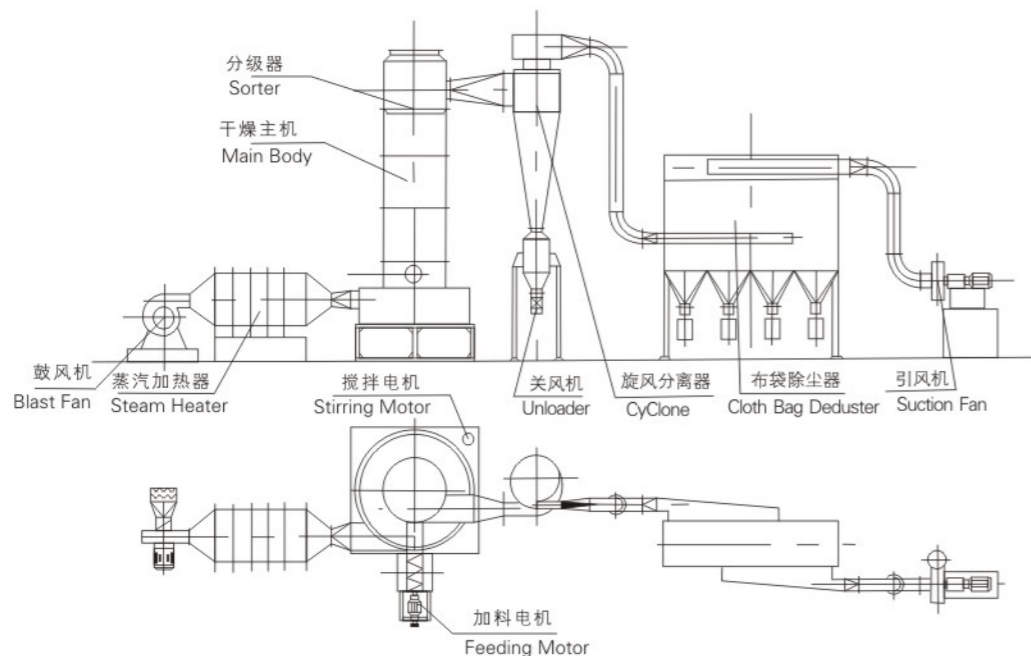
Hot air enters into stirring and crushing and drying chamber from the bottom of dryer with suitable atomizing speed. It exerts strong shearing, blowing, floating and rotating effect to raw material. Therefore raw material is granulated through centrifugating, shearing, impacting and friction effect. 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 as strong drying capacity.





## XSG 系列快速旋转闪蒸干燥机 XSG Series Spin Flash Dryer

### 结构示意图 Schematic of structure



### 特点 Features

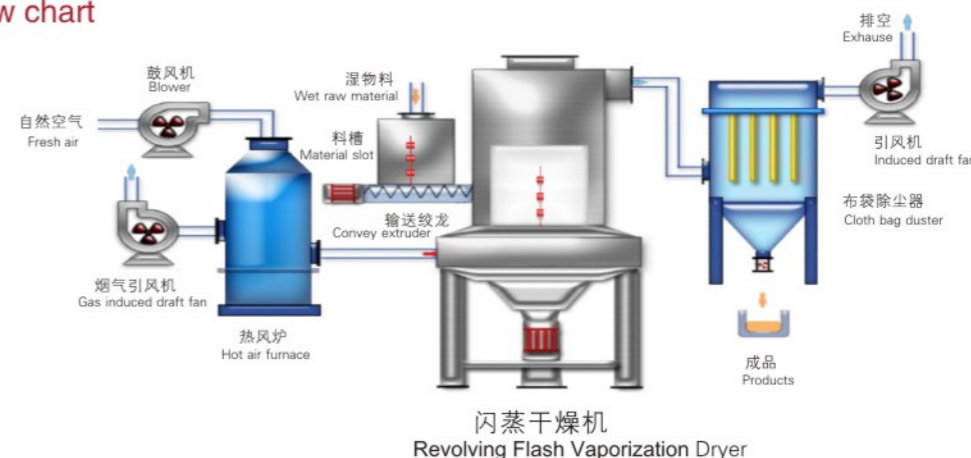
- 多种加料装置供选择，加料连续稳定，过程中不会产生架桥现象。
- 干燥机底部设置特殊的冷却装置，避免了物料在底部高温区产生变质现象。
- 特殊的气压密封装置和轴承冷却装置，有效延长传动部分的使用寿命。
- 特殊的分风装置，降低了设备阻力，并有效提供了干燥器的处理风量。
- 干燥室装有分级环及旋流片，物料细度和终水份可调。（如碳酸钙终水份可调节器至 $\leq 0.1\%$ ）
- 相对其它干燥方法而言，可有效增加物料比重。
- 干燥室内周向风速高，物料停留时间短，有效防止物料粘壁及热敏性物料变质现象，达到高效、快速、小设备、大生产。
- Many kinds of feeding equipment for choosing, and feeding is continue and static.
- Set up the special cooling device in the dryer bottom, has prevented raw material to turn carbonized and chang color in the high-temperature district of the bottom.
- Special atmospheric pressure seal installation and bearing cool the device, the service life of the running part is extended effectively.
- Special points of wind device, has reduced the obstruction of the equipment, and has offered the wind amount of treatment of the dryer effectively.
- Dry room equip with hierarchical ring and swirl slice, supplies detailed degree and final moisture content adjustable. (Such as calcium carbonate the final moisture can adjust to less than 0.1%)
- Compared to other dry methods, it can increase the specific gravity of raw material effectively.
- Because gas speed at circle inside the drying chamber is high, the staying time of raw material is short, it prevents the materials stay on the wall of the dyer chamber and the material turn deteriorate effectively, reach high-efficient, fast, little equipment, great production.

## XSG 系列快速旋转闪蒸干燥机 XSG Series Spin Flash Dryer

### 适应物料 Material

- 无机类:硼酸、碳酸钙、氢氧化物、硫酸铜、氧化铁、碳酸钡、三氧化锑, 各种金属氢氧化物, 各种重金属盐、合成冰晶石等。
- 有机物:阿特拉津(农药杀虫剂)、月桂酸隔、苯甲酸、安息香酸、杀菌丹、草酸钠、醋酸纤维素等。
- 陶瓷类: 高岭土、二氧化硅、粘土。
- 染料类: 蒽醌、黑色氧化铁、靛蓝颜料、丁酸、氢氧化钛、硫化锌, 各种偶氮染料中间体。
- 食品类: 大豆蛋白、胶凝淀粉、酒糟、小麦糖、小麦淀粉。
- Inorganic: boric acid, calcium carbonate, hydroxide, copper sulphate, iron oxide, carbonic acid barium, antimony trioxide, various kinds of metal caustics, various kinds of heavy metal salt, forming the ice crystal, etc..
- Organic: Atrazine (agriculture chemical insecticide), cadmium laurate, benzoic acid, Monosultap sodium oxalate, cellulose acetate
- Pottery: Kaolin, oxidizing silicon, clay.
- The dyestuffs: Anthracene quinone, black iron oxide rust, indigo pigment, butyric acid, hydrogen oxidize the titanium, zinc sulfide, various kinds of azo dyes intermedia.
- Food: Soy protein, gelatinized starch, distiller's grains, wheat candy, wheat starch.

### 流程图 Flow chart



### 技术参数 Technical parameters

项目Items 型号Type	主机内径(mm) Barrel diameter	处理风量(m <sup>3</sup> /h) Treatment wind capacity	蒸发水量(kg/h) Water evaporation quantity	最大装机容量(kw) Max. equipment capacity	最大高度(m) Max. high	占用平面m <sup>2</sup> occupied area
XSG-4	400	1150-2300	58-73	21.4	4.6	27
XSG-6	600	2500-5100	130-163	34.2	5.5	39
XSG-8	800	4500-9000	238-297	63.5	6.0	40
XSG-10	1000	7000-13500	345-430	68	6.5	55
XSG-12	1200	10000-20000	515-645	94	6.8	62
XSG-14	1400	16600-28000	730-910	130	7.0	89
XSG-16	1600	18000-38100	962-1203	160	7.2	160

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

## QG 脉冲气流干燥机 QG Series Pulse Air Flow Dryer

### 原理 Principle

QG系列脉冲式气流干燥机是一种批量大，效率较高的干燥设备，它采用瞬间干燥的原理，利用载热空气的快速运动，带动湿物料，使湿物料悬浮在热空气中，这样强化了整个干燥过程，提高了传热传质的速率，经过气流干燥的物料，非结合水分几乎可以全部除去，并且所干燥的物料，不会产生变质现象，产量可比一般干燥机干燥有显著提高，用户可在短期内取得较高的经济效益。

QG airstreams pulse drier is a large quantity production drier, it adopt instant drying principle, utilize hot air's quick move to drive damp raw material and make it floats in the hot air, this can strengthen the whole drying process, improve the speed of hot exchange. If raw material is dried by this equipment, non-combined moisture can be removed completely, dried material never metamorphosed, compared with general drier, output is remarkably raised.



### 适应物料 Material

这种类型的设备，适应的物料比较多，除基本型提及的物料外，还有：安眠酮、A. B. C中间体、A. B. S树脂、A. S. C、白炭黑、苯茶吡唑酮、茶粕、草酸催化剂、促进剂m. d. m、触媒、沉淀炭粉、对乙酰氨基苯磺酰氯、对氨基水杨酸、哆耳玛托、对苯二酸、二乙苯铵、二氧化钛、活性炭、氟硅酸钠、氟石矿、硅胶粉末、合成树脂、磷酸钙、聚丙烯树脂、金霉素、焦硅酸钠、糠氨酸咖啡渣四环素、三氧化铁、碳酸钙、玉米蛋白、氧化铁、石膏缓凝剂等。

The kinds of dry equipment can be suitable for more raw materials. Besides the raw materials mentioned in basic type drier, the following raw materials can also be dried. They are hyminal, ABC intermediate, ABS resin, ASC, white carbon black, phthalimidine, catalyst for oxalic acid, accelerant m.d.m, catalyst, deposited carbon powder, p-acetamidobenzene sulfonyl chloride, sodium para-aminosalicylate, terephthalic acid, diethylaniline, titanium dioxide, active carbon, sodium fluosilicate, fluorite, silica gel powder, synthesis resin, calcium hydrogen phosphate, PP, aureomycin, sodium disilicate, oral glucose, sodium sulfate, sulphide ore. Phosphorus ore powder, blue BB, PVC, phosphate fertilizer, acheomycin, ferric oxide, calcium carbonate, ilmenite, copper ore, potato, tail coal, stearate, maize protein, medicine, dose, ferric oxide, calcium sulphate retarder and so on.

### 技术参数 Technical parameters

型号 spec	蒸发水份 moisture to be evaporated(kg/h)	装机功率(kw) power	占地面积(m²) occupied area	高度(m) Height
QG 50	50	7	20	14
QG 100	100	13	32	14
QG 200*	200	21	40	15
QG 250	250	24	64	15
QG 500	500	43	96	18
QG 1000*	1000	100	120	18
QG 1500*	1500	150	200	20

注：部分参数设计时视不同物料有所调整，以设计为准。



## QFF 系列强化气流干燥机 QFF Series Enhanced Flash Dryer

### 原理 Principle

与QG系列脉冲气流相比，具有物料停留时间长，产品终水分低的优势，扩展了处理物料的范围。

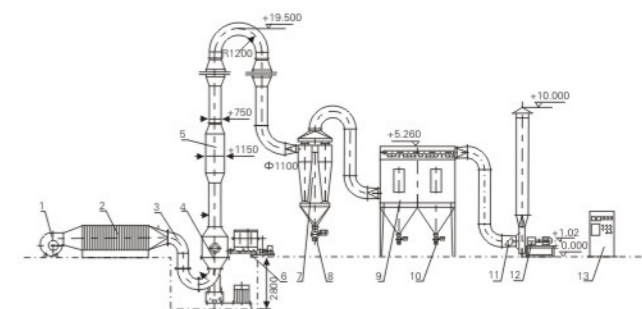
底部强化器设计独特，搅拌齿为菱形，其流线性能使风阻达到最小，设置在圆锥形料斗内，分动刀和定刀，粉碎效果显著，使下落的结块物料迅速粉碎为适合气流干燥的粉粒料，搅拌的另一个主要作用是分散物料，加大了与料斗下面进来的高速热风的接触面积，于是料斗区形成了一个强烈传热传质的流化床，大部分湿分在料斗区被干燥。随着干燥的进行，变轻变细的干料受气流作用明显，与气流一起上升并进一步干燥，最后从干燥塔顶部出来进入物料收集系统。

Compared with the QG series pulse air flow dryer, this dryer can make material to stay a long time and the product has lower water content, In addition, overall height is also lower than QG dryer.

The bottom of dryer has the unique enhanced design, stirring rack is diamond shaped, its linear flow design can reduce wind resistance into a minimum degree, also the grinding knives are equipped at the bottom, the results of grinding are obvious, the falling the materials can be rapidly crushed into powders which are suitable for air flow drying, another function of stirring is dispersing materials, thus can enlarge the contacting area with high speed hot air coming from the bottom, and most of moisture is dried during this stage, and then the dried material becomes lighter and lighter, and flow up with hot air, finally comes out from the top of dryer and goes into material collecting system.



QFF-1800强化气流干燥机



### 适应物料 Material

本机特别适合处理含水量比较大的呈膏糊状的湿物料，以及用其他气流干燥方法无法干燥的物料，适用于滤饼、膏状、带有一定粘性、要求成品为粉末的产品。

This dryer is suitable for the raw materials that contains high moisture and appear paste and other raw materials that can not be dried with other drying methods, also apply to the cake, paste, with a certain viscosity, require finished products for the powder.

### 技术参数 Technical parameters

型号 Spec	蒸发能力 Kg H <sub>2</sub> O/h	功率kw equipped power kw	占地面积m² occupied area m²	主塔高度m height m
QFF50	50	12	16	11
QFF100	100	25	26	13
QFF200	200	44.5	35	16
QFF250	250	53.5	51	18
QFF500	500	67.5	78	19
QFF1000	1000	150	105	22
QFF1500	1500	183	120	23

注：

1、水分蒸发量是以进风温度为180℃、出风温度为80℃时每小时蒸发的水分。

2、除以上型号外可为用户作特殊设计。

3、以上装机容量为标准配套，根据物料不同功率会有变动。

Note:

1. The evaporated amount of moisture is calculated when the temperature of inlet is 180°C and the temperature of outlet is 80°C.

2. Besides the models above mentioned, special specification can also be made as request.

3. The equipped capacity above mentioned is standard. The power can also be decreased in accordance with practical conditions.

## DW 系列单层带式干燥机 DW Single-layer Mesh-Belt Dryer



### 概述 Description

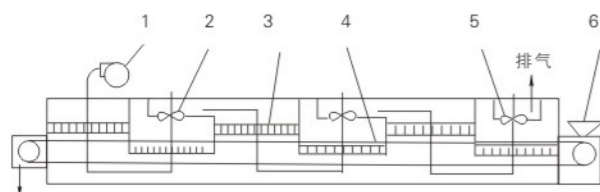
该机是穿流连续式干燥设备，用于透气性较好的片状、条状、颗粒状物料的干燥，对于脱水蔬菜、中药饮片等类含水率高、而温度不允许高的物料尤为合适；该系列干燥机具有干燥速度快、蒸发强度高、产品质量好的优点，对脱水滤饼状的膏状物料，需经造粒或制成棒状后亦可干燥。

This machine is a continuous penetrating flow drying equipment applied for drying pieces strip and particles state materials with good ventilation. The machine is suitable for the materials such as dewatering vegetable, herbal medicine of traditional Chinese medicine and others, for which the water contents are high and high drying temperature is not high. The machine owns the advantages, of fast drying speed, high evaporation capacity and good product quality. The de-watered & filtered cake state paste material should be made into particles or strips before drying process.

### 特点 Features

- 可以调节空气量、加热温度、物料停留时间及加料速度以取得最佳干燥效果。
- 设备配置灵活，可使用网带冲洗系统及物料冷却系统。
- 大部分空气循环利用，高度节省能源。
- 独特的分风装置，使热风分布更加均匀，确保产品品质的一致性。
- 热源可采用蒸气、导热油、电或燃煤(油)热风炉配套。
- Amount of air, heating temperature, time of material stay on the belt and velocity of feeding material can be adjusted in order to obtain the best drying effect.
- Equipment's configuration is very flexible. It can use the netlike belt washing system and cooling raw material system.
- Hot air can be circularly applied, the energy is greatly saved.
- Unique air dividing device, it makes hot air distribute uniformly; this can guarantee products' quality.
- Heating source can be selected from steam, conducting heat oil, electricity, coal furnace and oil burner.

### 结构示意图 Schematic of structure



- 1、送气风机 2、循环风机 3、蒸汽加热器  
4、输送带 5、排气风机 6、加料斗  
1.inter air blower 4.transmission belt  
2.circulation air blower 5.air exhaust fan  
3.steam heater 6.feeding hopper

## DW 系列单层带式干燥机 DW Single-layer Mesh-Belt Dryer

### 原理 Principle

物料由加料器均匀地铺在网带上，网带一般采用12-60目不锈钢丝网，由传动装置拖动在干燥机内移动。干燥机由若干单元组成，每一单元热风独立循环，部分尾气由专门排湿风机排出，废气由调节阀控制，热气由下往上或由上往下穿过铺满物料的网带完成热量与质量传递的进程，带走物料水份。网带缓慢移动，运行速度可根据物料温度自由调节，干燥后的成品连续落入收料器中。上下循环单元根据用户需要可灵活配备，单元数量亦可根据需要选取。

The materials are uniformly distributed on the mesh-belt by the material feeder. The mesh-belt generally adopts 12-60 mesh stainless steel mesh and it is drawn by a transmission device and move inside the dryer. The dryer is composed of several sections. For each section, the hot air is circulated separately. Part of exhausted gas is exhausted by a special moisture exhaust blower. The waste gas is controlled by an adjustment valve. The hot air passes through the mesh-belt covered with material from the top to the bottom or from the bottom to the top and this will complete the heat and mass transfer process. This process will bring water away. The mesh-belt moves slowly, running speed can be freely adjusted according to the material property. The final products after the drying process will fall into the material collector continuously. The top and low circulation units can be freely equipped according to the user's requirements. The number of section might be selected according to the production demands.



### 应用 Application

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

De-watering vegetable, particle feed, gourmet powder, shredded coconut stuffing, organic plastic, compound rubber, acral fibre, medicine product, medicine material, small wooden product, plastic product, aging and solidification for the electronic component and device.

### 技术参数 Technical parameters

型号 spec	单位 unit	DW-1.2-8	DW-1.2-10	DW-1.6-8	DW-1.6-10	DW-2-8	DW-2-12
单元数 unit number		4	5	4	5	4	6
带宽 belt width (m)	m	1.2	1.2	1.6	1.6	2	2
干燥段长 drying section length	m	8	10	8	12	8	12
铺料厚 thickness of the material	mm			10~80			
使用温度 temperature	℃	60~130					
蒸汽压 steam pressure	Mpa	0.2~0.8					
蒸汽耗量 steam consumption	kgsteam/kgH <sub>2</sub> O	2.2~2.5					
干燥强度 drying strength	kgH <sub>2</sub> O/h	6~20kg/m <sup>2</sup> ·h					
风机总功率 total power of the blower	kW	3.3	4.4	6.6	8.8	12	16
设备总功率 total power of the equipment	kW	4.05	5.15	7.35	9.55	13.1	17.1

注：部分参数设计时视不同物料有所调整，以设计为准。

## DWT 系列脱水蔬菜干燥机 DWT Series Belt Dryer for Vegetable Dehydration

### 概述 Description

DWT脱水干燥机是在传统网带式干燥机基础上研究开发的专用型设备,具有较强的针对性,实用性,能源效率高,广泛用于各类地区性和季节性蔬菜、果品的脱水干燥,如:蒜片、南瓜、魔芋、白萝卜、山药、竹笋等,已拥有用户50多家,在线设备80多台套,是国内最富经验的蔬菜干燥设备生产企业,工厂科技人员长期跟踪服务于这些用户,深入用户进行调试研究,得到第一手实践资料并结合国外先进技术,不断改进完善设备,到目前为止,已开发了对第三代DWT系列蔬菜脱水干燥机,我们在为用户生产制作设备时,根据所需干燥产品的特性,用户工艺要求,结合十几年来积累的经验,为用户设计制作出最适用,品质最佳的蔬菜干燥设备。



DWT Series Dryer for Vegetable Dehydration is a special equipment researched and developed on the basis of traditional net belt dryer, it has stronger pertinency, practicability and high efficiency of energy. It is wide used for all kinds of vegetables dehydration such as garlic, cushaw, giantarum, white turnip, yam, bamboo shoot, etc at different region and season, our factory has more than 50 of customers and more 80 of production line in operation. Our factory is an enterprise with the richest experience to manufacture dryer for vegetables dehydration. The technicians of our factory carry out after sales service for customers all the year round and help customers to debug and produce. There fore they have got first-hand practical data and combined domestic and abroad advanced technology and improved and perfected the equipment. Till the third generation, DWT series dryer for vegetables dehydration has been developed. we are making advanced productive equipment for customers. according to the characteristics of raw materials be dried and the process requirements of customers and combined the accumulated experience for more than ten years, we have made the most suitable and the dryer for vegetables dehydration to supply customers.

### 应用 Application

能满足根、茎、叶类条状、块状、片状、大颗粒等蔬菜物料的干燥和大批量连续生产,同时能最大限度的保留产品的营养成分及颜色等。

干燥的典型物料有:蒜片、南瓜、胡萝卜、魔芋、山药、竹笋、辣根、洋葱、苹果等。

It can meet to dry different vegetables such as, root, halm, leaf, tuberos rot, big granule and produce in batch. Meanwhile it can maintain content of nutrition, color, etc of vegetable in most extent.

The type raw materials are garlic, cushaw, carrot, giantarum, while turnip, yam, bamboo shoot, capsicum, onion, apple, etc.

### 特点 Features

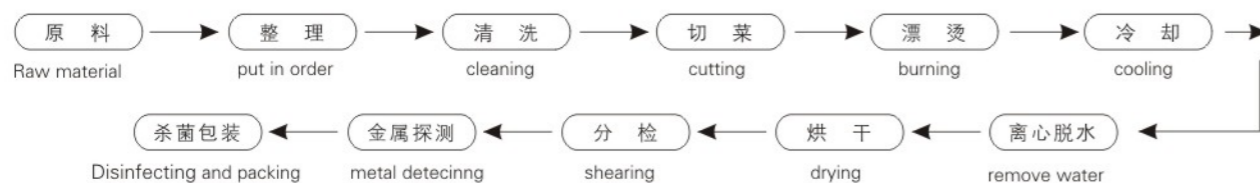
干燥面积、风压、风量、干燥温度、网带速度均可调节,以适应蔬菜的特性及品质要求。

可根据蔬菜的不同特点,采用不同的工艺水流程及添加配套必要的辅助设备。

Its dry area, air pressure, air amount, dry temperature and speed of net belt can be adjusted in order to suitable for different characteristics of vegetable and the requirement of quality.

It can adapt different process and equip necessary auxiliary equipment in accordance with different characteristics of vegetable.

### 工艺流程 Technological process



## DWT 系列脱水蔬菜干燥机 DWT Series Belt Dryer for Vegetable Dehydration

### 原理 Principle

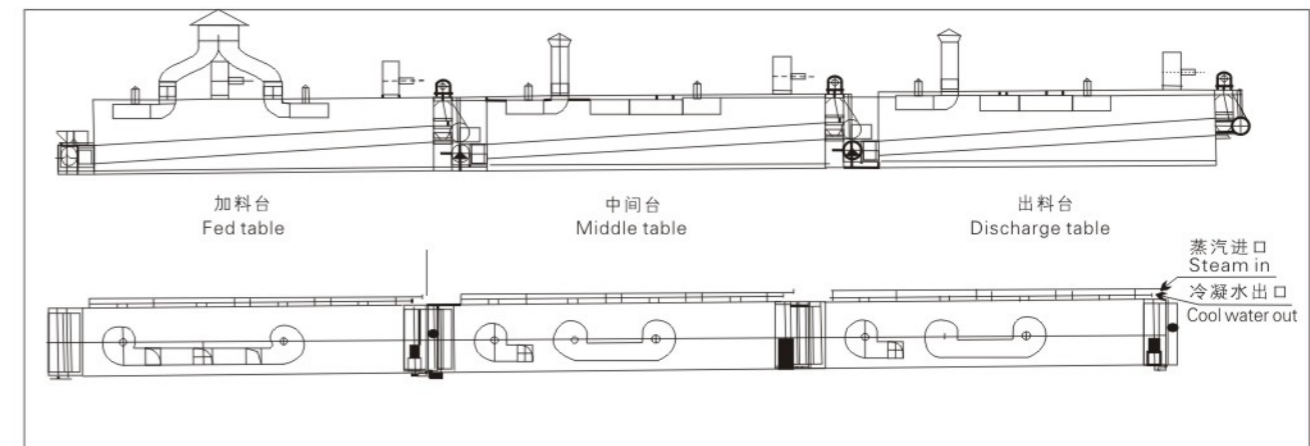
蔬菜脱水干燥机分别有加料器、干燥床、热交换器及排湿风机等主要部件组成。

干燥机工作时,冷空气通过热交换器进行加热,采用科学合理循环方式,使热空气穿流通过床面上的被干燥物料进行均匀的热质交换,机体各单元内热气流在循环风机的作用下进行热风循环,最后排出低温高湿度的空气,平稳高效地完成整个干燥过程。

The dryer for vegetable dehydration consists of feeder, drying bed, heat exchanger, damp exhaust fan, etc.

When operation, air will be entered into dryer and heated through heat exchanger. Being adapted scientific and reasonable cycle method, the hot air will pass through raw materials to be dried on the bed and carry out uniform heat exchange. Under the action of cycle fan, the hot air stream inside each unit of the dryer will carry out hot air cycle. Final air with low temperature and high damp will be out. The whole drying process with stable and high effect will be finished.

### 结构示意图 Structure diagram



### 技术参数 Technical parameters

型号Type	DWT1.6-I (加料台) fed table	DWT1.6-II (中间台) middle table	DWT1.6-III (出料台) discharge table	DWT2-I (加料台) fed table	DWT2-II (中间台) middle table	DWT2-III (出料台) discharge table
网带宽belt width (m)	1.6	1.6	1.6	2	2	2
干燥段长drying section length (m)	10	10	8	10	10	8
铺料厚度 thickness of the material to be covered(mm)	≤100	≤100	≤100	≤100	≤100	≤100
使用温度temperature(°C)	50-150°C	50-150°C	50-150°C	50-150°C	50-150°C	50-150°C
换热面积Areae of heat conduction(m <sup>2</sup> )	525	398	262.5	656	497	327.5
蒸汽压力steam pressure(MPa)	0.2-0.8	0.2-0.8	0.2-0.8	0.2-0.8	0.2-0.8	0.2-0.8
干燥时间drying time(h)	0.2-1.2	0.2-1.2	0.2-1.2	0.2-1.2	0.2-1.2	0.2-1.2
装机功率power(kw)	15.75	12.75	9.55	20.75	16.75	12.55
外形尺寸Overall Dim.(m)	12×1.81×1.9	12×1.81×1.9	10×1.81×1.9	12×2.4×1.92	12×2.4×1.92	10×2.4×1.92

注:1、将上表中同一规格的网带干燥机加料台、中间台、出料台三台串联使用,保证蔬菜脱水干燥生产工艺要求,显著提高产量,有效保证产品质量。  
2、设备高度不包括风机、风管高度。3、部分参数设计时视不同物料有所调整,以设计为准。

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

## DW 系列多层带式干燥机 DW Multi-layer Mesh-Belt Dryer

### 产品介绍 Product introduction

DW系列多层带式干燥机是成批生产用的连续式干燥设备，用于透气性较好的片状、条状、颗粒状物料的干燥，对于脱水蔬菜、催化剂、中药饮片等类含水率高、而物料温度不允许高的物料尤为合适；该系列干燥机具有干燥速度快、蒸发强度高、产品质量好的优点，对脱水滤饼类的膏状物料，需经造粒或制成条状后方可干燥。

The belt drier is a continuous drying equipment in batch production. It is suitable for drying the raw materials that is in the shape of piece, strip or granule and is good in permeability. Particularly it is suitable for such raw materials that contain high moisture and are not permitted high temperature for example, dehydrated vegetable, catalyst, drinking tablet of Chinese traditional medicine. Its features are fast in drying speed, strong in vaporization, good in quality of products.

Typical products Dehydrated vegetable, granule feed, monosodium glutamate, check extraction, organic pigment, synthetic rubber, propylene fiber, medicine, medical material, small wooden products, plastic products, aging or solidifying for electronic elements. For pasted raw material such as filter cake, it can be dried after shaped through granulator or extruder.



### 概述 Description

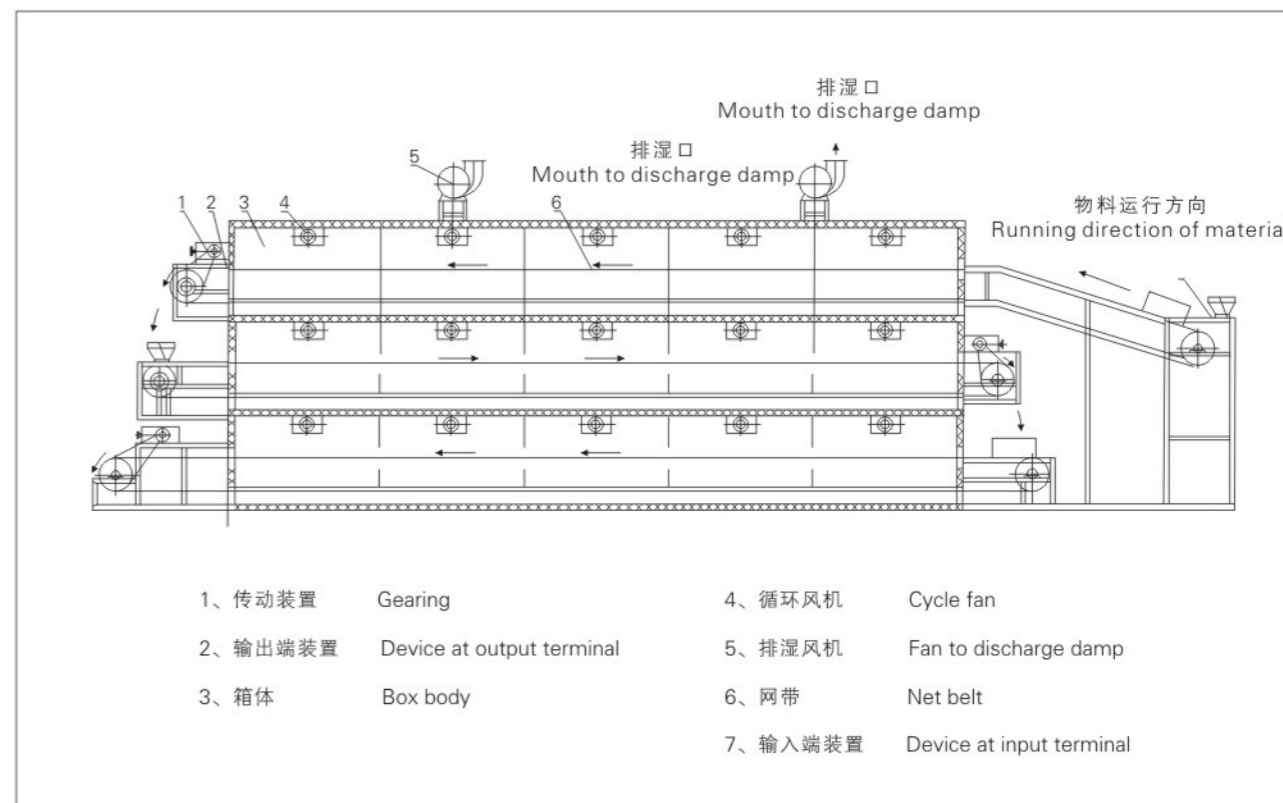
DW系列多层带式干燥机适用于大规模生产干燥速率较低的难干燥物料，设备结构紧凑，占地面积小，操作简单，维护方便、运行稳定。可根据物料的干燥特性设计成不同的热风循环干燥形式，是热风循环烘箱的延伸和改进，广泛应用于冶金助剂、化工、食品、包装等领域。随着企业技术进步，产品技术含量的提高，多层带式干燥机已具备满足大生产、多元化、集中控制、连续生产的能力。具有高效、节能、易于管理的优势。

DW series many layers belt dryer is used in the material hard to dry and low dry speed. The equipment structure is compact. It covers small area with easy operation, convenient maintain and steady running. The equipment extend and promote the heat wind circle oven which design the dryness process with different heat wind circle as per the dryness characteristics of materials. It is widely used in chemical, metallurgy industry, food, packaging. The dryer has lots of superiorities as high efficiency, saving energy, easy management, larger output, constant product and varied ability.



## DW 系列多层带式干燥机 DW Multi-layer Mesh-Belt Dryer

### 结构示意图 Schematic of structure



### 技术参数 Technical parameters

型号 Spec	单位 unit	DW <sub>3</sub> -1.2-8	DW <sub>3</sub> -1.2-10	DW <sub>3</sub> -1.6-8	DW <sub>3</sub> -1.6-10	DW <sub>3</sub> -2-8	DW <sub>3</sub> -2-10
单元数 Unit number		4×3	5×3	4×3	5×3	4×3	5×3
干燥段长 Drying section length	m	24	30	24	30	24	30
铺料厚 Thickness of the material	mm	10-80					
使用温度 Temperature	°C	50~140					
蒸汽压力 Steam pressure	Mpa	0.2~0.8					
蒸汽耗量 Steam consumption	kg/h	360-600	420-720	450-840	480-960	480-960	630-1350
换热面积 Area of heat exchange	m <sup>2</sup>	816	1020	1056	1320	1344	1680
干燥强度 Drying strength	kgH <sub>2</sub> O/h	150-450	220-550	240-600	280-750	280-750	350-900
内机总功率 Power equipment inside	kW	30.8	37.4	42	51	56	68
外机总功率 Power equipment outside	kW	35.3	41.9	46.5	55.5	60.5	72.5
外形尺寸 Overall dimensions	m	9.77×2.2×4.5	11.77×2.2×4.5	9.77×2.6×4.5	11.77×2.6×4.7	9.77×3.06×4.9	11.77×3.06×4.9
总重 Weight	Kg	4800×3	5780×3	5400×3	6550×3	6350×3	7800×3

注: 对于干燥温度在250-350°C时, 本公司可根据实际物料进行特殊设计。

## LPG 系列高速离心喷雾干燥机 LPG Series High Speed Centrifugal Spray Dryer

### 概述 Description

喷雾干燥是液体工艺成形和干燥工业中应用最广泛的工艺。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。

Spray drying is the technology most widely used in the liquid technology shaping and in the drying industry. The drying technology is most suitable for producing solid powder or particle products from liquid materials, such as: solution, emulsion, suspension and pumpable paste states. For this reason, when the particle size and distribution of the final products, residual water contents, mass density and the particle shape must meet the precise standard, spray drying is one of the most desired technologies.

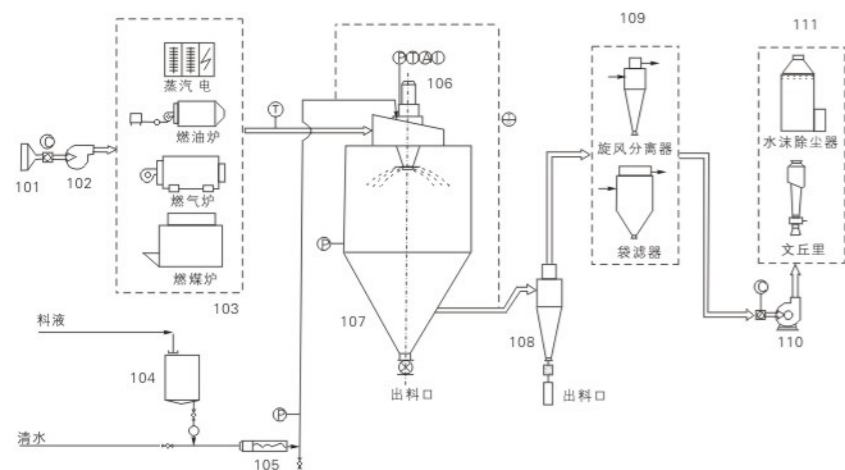
### 原理 Principle

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 the air been filtered and heated the air enters into the air distributor on the top of the dryer. The hot air enters into the drying room in the spiral form and uniformly. Passing through the high-speed centrifugal sprayer on 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 the heat air, the materials can be dried into the final products. The final products will be discharged continuously from the bottom of the drying tower and from the cyclones. The waste gas will be discharged from blower.

### 流程图 Flow chart

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



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

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  
Pump to supply raw material
- 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 dust collector (Cyclone, Bag filter)
- 110-引风机  
Induced draft fan
- 111-湿式除尘器(水沫除尘器、文丘里)  
Damp duster (Powder Duster)



## LPG 系列高速离心喷雾干燥机 LPG Series High Speed Centrifugal Spray Dryer

### 特点 Features

- 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。
- 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。
- 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。
- The drying speed is high when the material liquid is atomized, the surface area of the material will increase greatly. In the hot-air flow, 95%~98% of water can be evaporated at a moment. The time of completing the drying is only several seconds. This is especially suitable for drying the heat sensitive materials.
- Its final products own the good uniformity, flow ability & solubility. And the final products are high in purity and good in quality.
- The production procedures are simple and the operation and control are easy. The liquid with moisture contents of 40~60% (for special materials, the contents might be up to 90%) can be dried into the powder or particle products once a time. After the drying process, there is no need for smashing and sorting, so as to reduce the operation procedures in the production and to enhance the product purity. The product particle diameters, looseness and water contents can be adjusted through changing the operation condition within a certain range. It is very convenient to carry out control and management.



### 技术参数 Technical parameters

项目 Item	参数 parameter	LPG					
		5	25	50	100	150	200-2000
入口温度 inlet temperature °C		140-350 自控 automatically controlled					
出口温度 outlet temperature °C		~80-90					
水份最大蒸发量 kg/h Max. water evaporation capacity		5	25	50	100	150	200-2000
离心喷雾头转动形式 centrifugal spraying nozzle transmission mode		压缩空气传动 compressed air transmission		机械传动 mechanical transmission			
转速 (r.p.m) rotation speed		25000	18000	18000	18000	15000	8000-15000
喷雾盘直径 (mm) spraying disc diameter		50	100	120	140	150	180-340
热源 heat supply		电 Electricity	电+蒸汽 electricity+steam	电+蒸汽、燃油、煤气 electricity+steam, fuel oil and gas		由用户自己解决 settled by users themselves	
电加热最大功率 kW Max electric heating power		9	36	63	81	99	
长度×宽度×高度 (m) overall dimensions		1.8×0.93×2.2	3×2.7×4.26	3.7×3.2×5.1	4.6×4.2×6	5.5×4.5×7	根据具体情况确定 depends on the concrete conditions
干粉回收率 % dried powder collecting		≥95	≥95	≥95	≥95	≥95	≥95

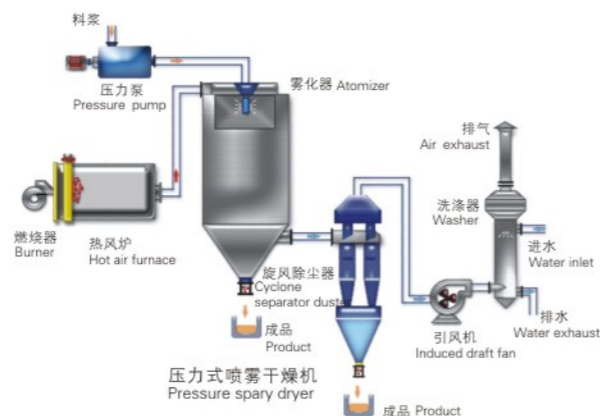
注：部分参数设计时视不同物料有所调整，以设计为准。

## YPG 系列压力式喷雾(冷却)干燥机 YPG Series pressure spray dryer/cooler

### 概述 Descriptions

压力式喷雾干燥造粒机是采用压力式雾化器借助隔膜泵的压力将溶液或浆状的物料雾化成细微液滴，使表面积显著增大，经与热风进行充分热交换得以快速干燥(十几秒至几十秒)，从而得到粉体或细小颗粒产品的设备。

The liquid or paste raw material is spraied into minuty liquid drop by pressed spraier draw assistance from pressure of diaphragm pump, and quickly drying through short heat exchange.(10sec.) at last, the powder or small granule is obtained.



### 特点 Features

- 干燥速度快，特别适用于热敏性物料；
- 所得产品为球状颗粒，粒度均匀，流动性、溶解性好，产品纯度高，质量好；
- 使用范围广，可进行热风干燥、造粒、也可以进行冷却造粒、喷雾结晶、喷雾反应等。
- 可配备细粉回送，再湿附聚系统，满足用户对物料粒径的要求。
- 操作简单稳定，控制方便，容易实现自动化作业，产品粒径、松密度、水份在一定范围内可以调节。
- The dry speed is fast and suitable for drying thermal sensitivity 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 quaiy is good.
- It applied scope 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.
- The product particle diameters, looseness and water contents can be adjusted through changing the operation condition within a certain range.

### 技术参数 Technical parameters

型号 spec	单位 unit	50	100	150	200	300	500	1000
水份蒸发量 water evaporation capacity	Kg/h	50	100	150	200	300	500	1000
外形尺寸 overall dimension (φ × H)	mm	1600 × 8900	2000 × 11500	2400 × 13500	2800 × 14800	3200 × 15400	3800 × 18800	4600 × 22500
高压泵压力 high-pressure pump pressure	Mpa	2-10						
功率 power	kW	8.5	14	22	24	30	82	30
进风温度 inlet air temperature	℃	300-350						
产品含水量 product water contents	%	< 5(可达0.5) less than 5 percent, and 5 percent can be achieved.						
物料回收 material restoration	%	> 97						
电加热 electric heating	kW	75	120	150	温度低于200时，具体按实际计算。When the temperature is lower than 200, the parameters should be calculated according to the practical condition.			
电加蒸汽 steam electricity	Mpa+kW	0.5+54	0.6+90	0.6+108				
热风炉 hot air furnace	Kcal/h	100000	150000	200000	300000	400000	500000	1200000

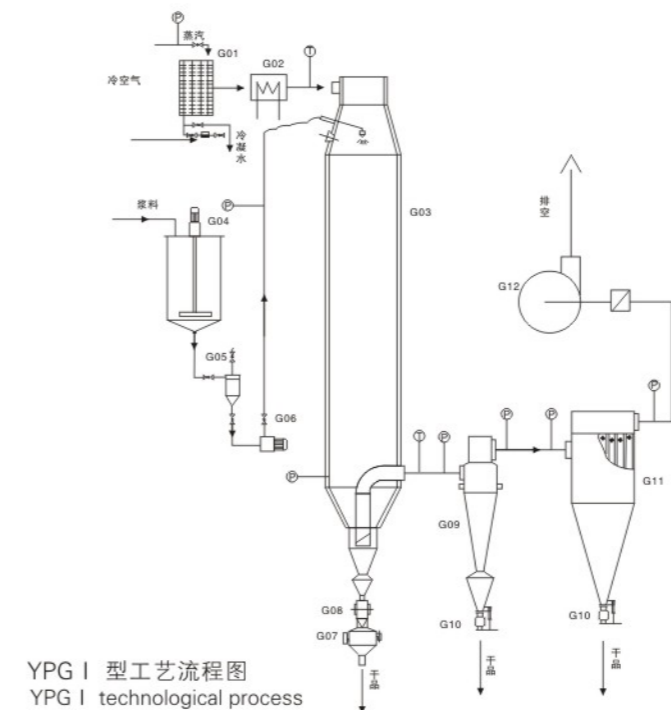
注：部分参数设计时视不同物料有所调整，以设计为准。

## YPG 系列压力式喷雾(冷却)干燥机 YPG Series pressure spray dryer/cooler

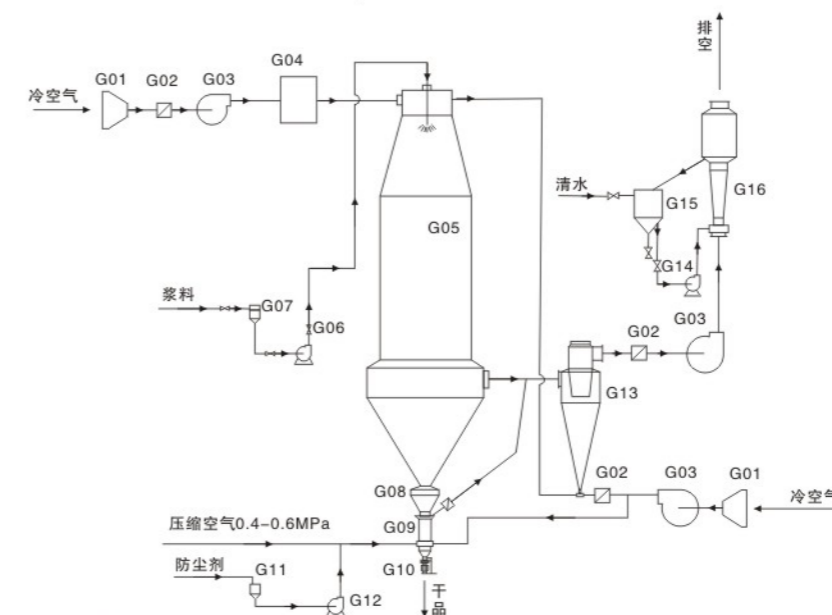
### 应用 Applications

食品、医药、化工、染化、陶瓷、生化、农药、塑料等适用具有相应流动性的液体。  
It is suitable for liquid of foodstuff, pharmaceutical, chemical industry, dyestuff, ceramics, agrochemicals, plastic and so on.

### 工艺流程 Technological process



YPG I 型工艺流程图  
YPG I technological process



YPG II 型工艺流程图  
YPG II technological process



## ZYG 系列中药浸膏喷雾干燥机 ZYG Series Spray Dryer For Chinese Traditional Medicine Extract

### 概述 Descriptions

该机采用全封闭形式，所有部件均采用不锈钢制造，配有三级净化装置，过滤后的空气达十万级要求。筒体与顶部装有冷壁装置，使壁温 $< 80^{\circ}\text{C}$ ，物料在壁上停留也不焦化变质现象，大大增加了收粉率（达95%以上），而且不会产生混药现象和粘壁现象。

基本原理：中药浸膏高速离心喷雾装置是离心式喷雾干燥技术在特定物料干燥中的应用，也是利用高速离心式雾化器使物料分散成雾状，与热空气所充分接触，完成瞬间干燥，形成粉状成品的干燥装置。

中药浸膏专用干燥机是专门用来解决，中药浸膏和植物液体的喷雾干燥机，它解决了物料在原LPG高速喷雾干燥机在中药浸膏干燥中出现的以下情况：

- 1.物料粘壁，收粉率低；
- 2.物料在壁上停留时间长，产生物料的焦化变质现象
- 3.难以清洗，不符合GMP要求；
- 4.产量低：LPG-150型喷雾干燥机，其产量只能处理50-60Kg/h液料。

鉴于以上状况，我厂根据中药浸膏的物料性质与工艺要求设计了中药浸膏干燥机难题，干燥后的物料颜色好、不变质，大大地提高了工厂的经济效益，中药浸膏与LPG高速离心喷雾干燥机相比有以下特点：

- 1.采用了三级空气净化，使进风达到10万级要求；
- 2.采用了冷壁装置，使内壁温度达到 $80^{\circ}\text{C}$ ，物料在壁上停留也不焦化；
- 3.整个体积是原LPG标准离心喷雾的3.5倍。
- 4.采用快开冲洗装置，适用于多品种生产要求
- 5.除尘采用了湿式除尘，使粉尘无外出，符合环保要求；
- 6.采用气扫装置，其效果更令人满意；
- 7.雾化器采用变频调速
- 8.采用了PLG控制，程控系统屏幕显示；
- 9.可以配带冲洗装置；
- 10.采用干空气密闭输送。



The machine adopts full seal form. All parts are made of stainless steel. It is equipped with three grades of filter. The filtered air is one hundred thousand grades. The cooling device of wall is installed at the cylinder body. It makes the wall temperature less than  $80^{\circ}\text{C}$ . Air sweeping device is installed inside the drying tower. The product will not be burnt or deteriorated even stays on the wall. The collection rate of powder is raised greatly. Moreover will not cause medicine mixed or wall stick.

Basic Principle: high-speed centrifuge atomizing for the extract of traditional Chinese medicine is an application of centrifuge atomizing technique. It is a high-speed atomizing dryer. The following problems are solved.

1. Raw material is stick on the wall and the rate of powder collecting is low.
2. Because the staying time of raw material on the wall is long, the phenomenon of burnt and degeneration can be produced.
3. It is difficult to clean and can not meet the requirement of GMP.
4. Low in output: Model LPG-150 atomizing centrifuge dryer can process 50-60kg/h of raw material liquid.

In view of this, according to the properties and process requirements of the extract of traditional Chinese medicine, our factory researched and designed the special dryer for the extract of traditional Chinese medicine and won items of china patent. It solves the historical difficult problems in drying the extract of traditional Chinese medicine. The color of dried raw material is good. The dried raw material does not degenerate. It raises the economic benefit greatly. Compared to ordinary LPG high-speed atomizing dryer, it has the following features:

- (1). Adopted three-grade air filter, the inlet air is one hundred thousand grade.
- (2). Adopted wall cooling device, the temperature of inner wall will be on more than  $80^{\circ}\text{C}$ . Even if raw material is stayed on the wall, it will not be burnt.
- (3). Its whole volume is 3.5 times of standard LPG high-speed atomizing dryer.
- (4). Adopted quick washing device, it is can meet the requirements of production for varieties if products.
- (5). Adopted wet-dedusting, there is no powder dust out. It is in conformity with the requirements of GMP.
- (6). Adopted air sweeping device, the clean effect is satisfied.
- (7). Equipped adopted frequency inverter control.
- (8). Adopted PLC control and display, and adapted frequency control.
- (9). Equipped with washing device on request.
- (10). Adopt the seal transport by dry air on request.

## ZYG 系列中药浸膏喷雾干燥机 ZYG Series Spray Dryer For Chinese Traditional Medicine Extract



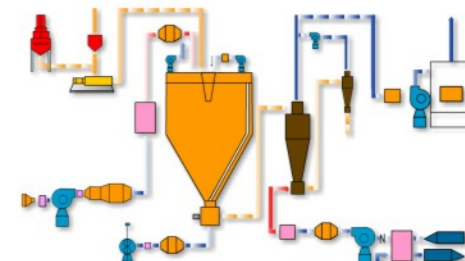
扫壁系统 Sweeping system



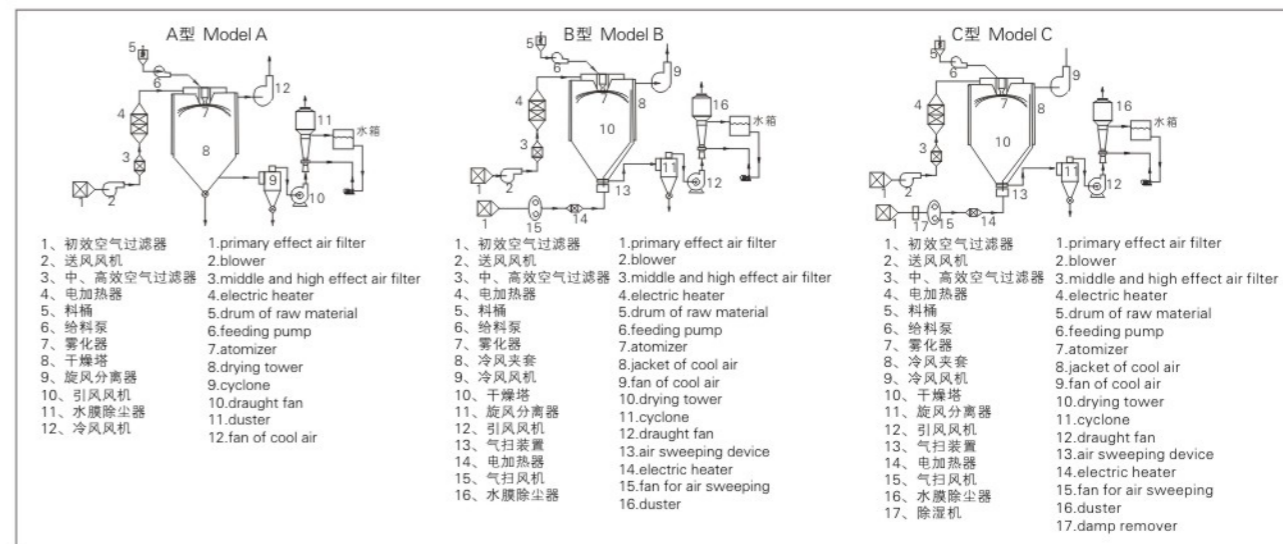
控制系统 Control System



冷冻除湿冷却系统 Desiccant cooling system freezing



系统流程图 System flow chart



### 技术参数 Technical parameters

型号 spec	ZYG-25	ZYG-50	ZYG-80	ZYG-100	ZYG-150	ZYG-200	ZYG-300
水份蒸发量 evaporation capacity(kg/h)	25	50	80	100	150	200	300
料液处理量 process amount of material liquid(kg/h)	25-34	50-68	80-108	100-135	150-203	200-270	300-406
成品含量 output of finished product(kg/h)	4.8-7.2	9.2-14	14.8-22.4	18.4-28	24-42	36.8-56.4	55-85
湿物料含固量 solid content of material liquid(%)	18-25						
成品含水率 moisture content of finished product(%)	3-5						
电功率 electric power(kw)	63	99	132	153	204	246	330
加热源 heat source	蒸汽加电 Steam plus electricity						
产品捕集方式及效率 collecting method 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 $\geq 95\%$ Two-grade cyclone or one-grade cyclone and one-grade web-method dedusted of 95%						
自控仪表 automatic control meters and instruments	热风温度及排风温度指标，自动调节温控仪 indicator of hot air and exhaust air temperature						
进风温度 temperature of air inlet( $^{\circ}\text{C}$ )	150-200						
出风温度 temperature of air outlet( $^{\circ}\text{C}$ )	80-100						
外形尺寸 overall dimensions(mm)	长L	7000	8000	9800	11000	12200	15000
	宽W	4000	5000	5700	6200	7000	9000
	高H	6900	7400	8000	8900	10000	12000

注：部分参数设计时视不同物料有所调整，以设计为准。



## XF 系列沸腾干燥机 XF Series Horizontal Fluidized Bed Dryer

### 概述 Descriptions

沸腾干燥，又称流化床，它是由空气过滤器、加热器、沸腾床主机、旋风分离器、布袋除尘器、高压离心风机、操作台组成，由于干燥物料的性质不同，配套除尘设备时，可按需要考虑，可同时选择旋风分离器、布袋除尘器，也可选择其中一种，一般来说比重较大的如冲剂及颗粒物料干燥只需选择旋风分离器，比重较轻的小颗粒状和粉状物料需配套布袋除尘器，并备有气力送料装置及皮带输送机供选择。

散粒状固体物料由加料器加入流化床干燥器中，过滤后的洁净空气加热后由鼓风机送入流化床底部经分布板与固体物料接触，形成流态化达到气固的热质交换。物料干燥后由排料口排出，废气由沸腾床顶部排出经旋风除尘器和布袋除尘器回收固体粉料后排空。

蒸汽、电、热风炉均可配用(按用户要求配套)。

它适用于散粒状物料的干燥，如：医药药品中的原料药、压片颗粒料、中药冲剂、化工原料中的塑料树脂、柠檬酸和其他粉状、颗粒状物料的干燥除湿，还用于食品饮料冲剂，粮食加工、玉米胚芽、饲料等的干燥。物料的粒径最大可达6mm，最佳为0.5~3mm。



Boiling dryer is also called as fluidized-bed. It consists of air filter, heater, fluidized-bed main machine, feeder, cyclone separator, cloth bag duster, high-pressure centrifuge fan and operation table. Because the properties of raw materials exist difference, when equip the dust removing equipment, it should consider the practical need. It can select cyclone separator and cloth bag duster at the same time or one of them. In general speaking, it needs to select cyclone separator only for raw material that is large in specific gravity and cloth bag duster for powder and small granule raw materials that is light in specific gravity. Meanwhile there is air feeding device and belt conveyor for selection.

Separated granule solid raw material is fed into fluidized-bed drier through feeder. Fresh air through filtering and heating is sent to the bottom of fluidizedbed by fan and contacts with solid raw material on distributing plate. In this way the fluidized state is formed and the heat exchange between air and solid is carried out. The dried raw material is discharged from outlet and wasted gas is exhausted from the top of fluidized-bed where catches solid powder through cyclone separator, cloth bag duster.

Steam, electricity or hot air furnace can be used (it can be supplied as request) It is suitable for drying separated granule such as, raw material of pharmaceutical industry, tablet, tablet of drink of Chinese traditional medicines; plastic resin, citric acid, other powder and granule of chemical industry, powder of drink, corn embryo feed of foodstuff industry and so on. The Max diameter of raw material to be dried will be 6mm and the best diameter will be 0.5~3 mm.



实际使用中的非标设计大型沸腾床 Fluidizing dryers under production on-site

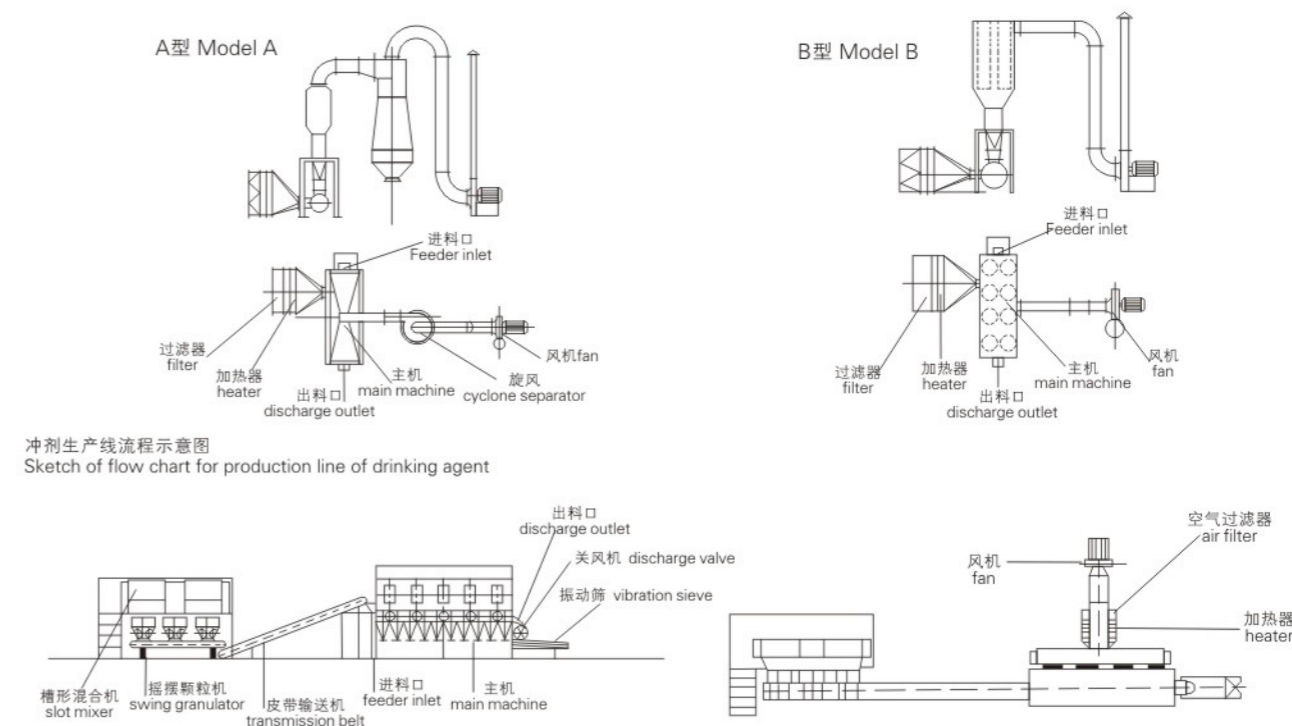
### 特点 Features

沸腾床干燥机可实行自动化生产，是连续式干燥设备。干燥速度快，温度低，能保证产品质量，符合药品生产GMP要求，蒸汽、电、热风炉均可配用。

This fluidized bed dryer can achieve automation and continuous drying process. It has a high drying speed and a low temperature and the product quality can be ensured, meeting GMP requirements. The heating resource can be steam, electricity or furnace.

## XF 系列沸腾干燥机 XF Series Horizontal Fluidized Bed Dryer

### 流程图 Flow chart



冲剂生产线流程图示意图 Sketch of flow chart for production line of drinking agent

### 技术参数 Technical parameters

型号规格 model and specifications	XF 0.25-1 (原XF10)	XF 0.25-2 (原XF20)	XF 0.25-3 (原XF30)	XF 0.25-6	XF 0.3-2	XF 0.3-4	XF 0.3-6	XF 0.3-8	XF 0.3-10	XF 0.4-4	XF 0.4-6
床层面积 area of bed layer (m <sup>2</sup> )	0.25	0.5	1.0	1.5	0.6	1.2	1.8	2.4	3.0	1.6	2.4
干燥能力 drying capacity (kg H <sub>2</sub> 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	18.5	30	37	48	30	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 in 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) overall dimensions (main machine) L(长)×W(宽)×H(高)(m)	1×0.6×3.35	2×0.6×3.35	4×0.6×3.35	6×0.6×3.35	2×0.7×3.4	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 <sup>2</sup> )	18	25	35	40	25	38	45	56	70	18	56

型号规格 model and specifications	XF 0.4-8	XF 0.4-10	XF 0.4-12	XF 0.5-4 (原XF50)	XF 0.5-6	XF 0.5-8	XF 0.5-10	XF 0.5-12	XF 0.5-14	XF 0.5-16	XF 0.5-18
床层面积 area of bed layer (m <sup>2</sup> )	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 <sub>2</sub> 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)	48	70	70	30	48	70	105	140	147	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 temperature of 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) overall dimensions (main machine) L(长)×W(宽)×H(高)(m)	8×1×3.58	8×1×3.58	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	14×1.2×4.1	16×1.2×4.1	18×1.2×4.1
占地面积 occupied area (m <sup>2</sup> )	74	82	96	50	70	82	100	140	180	225	268

注：一、加料方式有：1.星形加料。2.星形加料式和气流输送并用。3.皮带输送。4.用户自定。二、可实现自动化生产。三、除以上型外，可为用户作特殊设计。四、根据物料不同，风机功率亦不同。  
 Note: 1.The feeding way has: (A).Star feeding (B).Combining star feeding and air conveyor (C).Belt conveying (D).decided by customer  
 2.Automatic production can be realized. 3.Besides the model above mentioned, the special model can also be designed and manufactured as request.  
 4.According different raw material, the power of fan will be differ.

## GFG 系列高效沸腾干燥机 GFG Series High-Efficiency Vertical Fluid Bed Dryer

### 原理 Principle

空气经加热净化后,由引风机从下部导入,穿过料斗的孔洞板。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 material is dried quickly.

### 应用 Applications

- 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 using the methods of humidity, high speed and mixing;
- Suitable for drying humidity block or powder raw material in the fields such as pharmaceutical, foodstuff, feedstuff, chemical industries and so on;
- The raw material is 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.



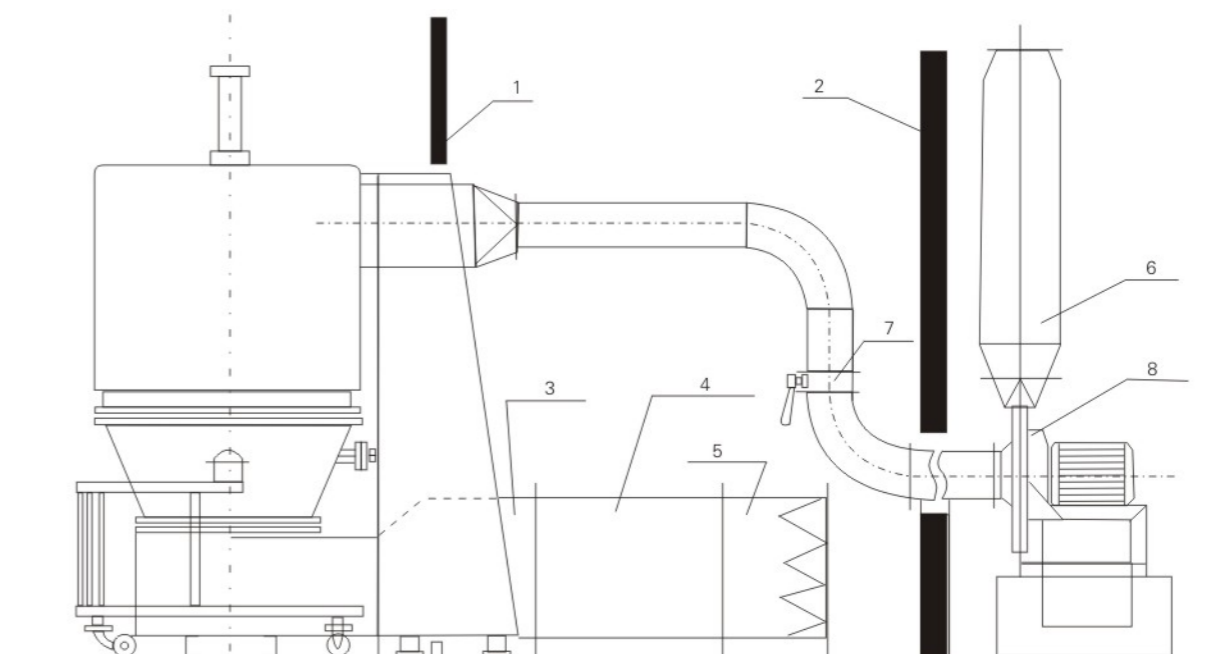
### 特点 Features

- 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20-30分钟。
- The structure of fluidized bed is round so as to avoid dead corner;
- Inside the hopper there is a stirrer in order to avoid agglomeration of raw material and forming canal of flow;
- The granule is discharged through the method of turning over. In this way it is very convenient and full. The discharging system can be designed as request too;
- It is operated at the conditions of negative pressure and seal. The air is filtered. Therefore it is simple in operation and convenient in clean. It is an ideal equipment that is in conformity with the requirements of GMP;
- The drying speed is fast and the temperature is uniform. In general the drying time is 20-30 minutes for each batch.



## GFG 系列高效沸腾干燥机 GFG Series High-Efficiency Vertical Fluid Bed Dryer

### 流程图 Flow chart



1、隔墙 Wall 2、隔墙 Wall 3、加热器 Heater 4、过滤器 Filter

5、过滤器 Filter 6、消音器 Silencer 7、调风器 Distributor 8、风机 Fan

### 技术参数 Technical parameters

项目 Item	单位 Unit	型号 Type							
投料 raw material	kg	60	100	120	150	200	300	500	
风机 Fan	风量 Air volume	m <sup>3</sup> /h	2361	3488	4000	4901	6032	7800	10800
	风压 Air pressure	mmH <sub>2</sub> 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	0.55	0.55	0.55	1.5	2.2	
搅拌转速 Stirring speed	r.p.m	11							
蒸汽耗量 Consumption of steam	kg/h	141	170	170	240	282	366	451	
操作时间 Time of operation	min	15-30(视物料情况而定)							
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

注:部分参数设计时视不同物料有所调整,以设计为准。

## FG 系列立式沸腾干燥机 FG Series Vertical Fluidized Bed Dryer

### 应用 Applications

本机主要适用于医药、食品、化工等行业进行粉末或颗粒物料的干燥。

The machine is main used for drying powder or granules from pharmaceutical, foodstuff, chemical and so on industries.

### 原理 Principle

- 流态化干燥、热质传递快;
- 在封闭负压下操作, 无粉尘飞扬;
- 采用防静电过滤材料, 操作安全;
- 设备无死角, 清洗彻底, 无交叉污染;
- 满足GMP规范要求。
- Fluid bed to achieve fast heat transmission of medium.
- Seal negative pressure operation, there is no dust.
- Because of using anti-static material as filter, it is safe in operation;
- The equipment has no dead corner so it is easy to clean fully and there is no cross pollution;
- It is in conformity with the requirements of GMP.



### 技术参数 Technical parameters

机型 spec			3	5	30	60	120	200	300	500	1000
项目 item	单位 unit										
原料容器 container of raw material	直径 dim.	mm	300	400	700	1000	1200	1400	1600	1800	2200
	容积 volume	L	12	22	100	220	420	670	1000	1500	2500
生产能力 production capacity	最小Min	kg/batch	1.5	4	15	30	80	100	150	250	500
	最大Max	kg/batch	4	6	36	72	140	240	360	600	1100
蒸汽耗量 consume of steam	kg/batch		12	23	70	140	211	282	366	465	800
压缩空气量 amount of compressed air	m <sup>3</sup> /min		0.3	0.3	0.3	0.6	0.6	0.9	0.9	0.9	1.5
风机功率 power of fan	kw		2.2	4	5.5	11	18.5	22	30	45	75
温度 temperature	°c		常温~120℃自动调节Adjustable from ambient to 120								
物料收率 collection rate	%		> 99								
操作时间 time of operation	min		15~30(视具体物料而定 depends on material)								
终湿含量 content of final moisture	%		~0.2(视具体物料而定 depends on material)								
噪音 noise	dB		≤ 75								
主机高度 height of main machine	mm		2100	2300	2500	3000	3300	3800	4000	4800	6200

注: 部分参数设计时视不同物料有所调整, 以设计为准。

## CT-C 系列热风循环烘箱 CT-C Hot Air Circulating Drying Oven

### 说明 Explanation

原型号 Original Model



国家行业标准型号(The standard type made by the industry of the State)



- 一、加热源有蒸汽、电、远红外、气电两用, 供用户选择
- 二、使用温度: 蒸汽加热50-130℃, 最高140℃
- 三、用电、远红外温度50-300℃, 可配套自控系统或电脑控制系统, 供用户选择
- 四、常用蒸汽压力0.2-0.8mpa(2-8kg/cm<sup>2</sup>)
- 五、配用电加热按1型计算15kw, 实用5-8kw/h
- 六、特殊要求在定货时表明
- 七、非标烘箱价格面议
- 八、使用温度大于140℃或小于60℃, 要在定货时注明
- 九、本厂出厂的烘车, 烘盘尺寸统一, 可以互换
- 十、烘盘尺寸: 460X640X45mm

- 1.Options of heat source: steam, electricity, or far infrared, or both steam electricity.
- 2.Drying temperature: steam heating 50-130 °C , Max.140 °C .
- 3.Electricity and far infrared:50-300 °C .Automatic control system and computer control system on request.
- 4.Commonly used steam pressure 0.2-0.8Mpa(2-8 bar).
- 5.For CT-C-I, electric heated, rated power consumption:15Kw, real consumption : 5-8Kw.
- 6.The special requirements should be indicated at the time of order.
- 7.Please consult as for any special requirements.
- 8.For operation temperature of over 140 °C or less than 60 °C , please indicate when order.
- 9.The ovens and baking trays made by our factory are uniform in dimensions, and can be exchanged each other.
- 10.Baking plate dimensions:460\*640\*45mm

### 概述 Description

CT-C型系列热风循环烘箱配用低噪音耐高温轴流风机和自动控温系统, 整个循环系统全封闭, 使烘箱的热效率从传统的烘房3-7%提高到到目前的35-45%, 最高热效率可达50%。CT-C型热风循环烘箱的设计成功, 使我国的热风循环烘箱达到了国内外先进水平。为我国节约了大量能源, 提高了企业的经济效益。1990年由国家医药管理局发布了行业标准, 统一型号为RXH。

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

### 应用 Application

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、生药、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。

This drying oven is suitable for the material and product hot solidification and dry de-watering in the pharmaceutical, chemical, food, farming, side-product, aquatic product, light industries, heavy industries and others industries. Such as: raw material medicine, crude drug, prepared herbal medicine of Chinese traditional medicine, plaster, powder, particle, drinking agent, pill, packing bottle, pigment, dyestuff, de-watering vegetable, dried fruit piece, sausage, plastics, resin, electric component, baking varnish and etc

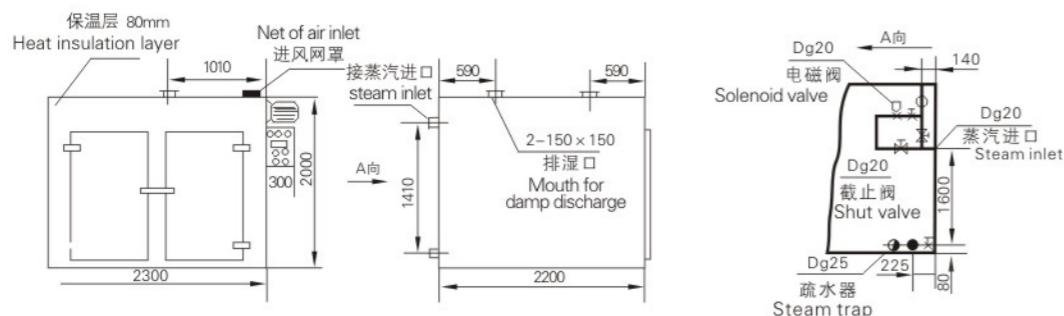
## CT-C 系列热风循环烘箱 CT-C Hot Air Circulating Drying Oven

### 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, 运转平衡。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 hot air is circulated in the oven. The Heat efficiency is high and the energy is saved. By using the forced ventilation function, there are adjustable air distribution plates inside the oven. The materials can be dried uniformly. The heating source might be steam, hot water, electricity and far infrared. With a wide selection. The whole machine is low in the noise. The operation is in balance. The temperature is controlled automatically. The installation and maintenance are easy. The application is wide. The machine can be used for drying various materials and is a versatile drying equipment.

### CT-C- II 型烘箱尺寸示意图 Dimensional diagram of CT-C- II drying oven



### 技术参数 Technical parameters

行业标准型号 spec. of industry standard	型号规格 specification	每次干燥量 batch drying capacity (kg)	配用功率 power (kW)	耗用蒸汽 steam to be consumed (kg/h)	散热面积 heat exchange arer (m <sup>2</sup> )	风量 velocity (m <sup>3</sup> /h)	上下温差 temperature different of the top and the bottom (°C)	配用烘盘 baking trays to be used	外型尺寸 overall dimensions (L × W × H)mm	配套烘车 baking cart to be used (set/辆)
RXH-5-C	CT-C-0	25	5	5	5	3400	± 2	8	1400x1200x1600	0
RXH-14-C	CT-C-IA	50	0.45	10	10	3400	± 2	24	1400x1200x2000	1
RXH-14-C	CT-C-I	100	0.45	18	20	3450	± 2	48	2300x1200x2000	2
RXH-27-C	CT-C-II	200	0.9	36	40	6900	± 2	96	2300x2200x2000	4
RXH-41-C	CT-C-III	300	1.35	54	80	10350	± 2	144	2300x3220x2000	6
RXH-54-C	CT-C-IV	400	1.8	72	100	13800	± 2	192	4450x2200x2000	8
RXH-25-A	高效高温远红外灭菌烘箱 功率配套按温度要求进行		High effect and high temperature far infrared sterilization oven The power will be equipped in accordance with the requirements of temperature.		1200x1000x1600					



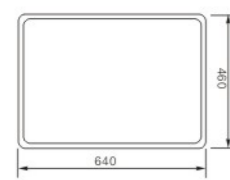
一次成型打孔盘  
Once shaping punched plate



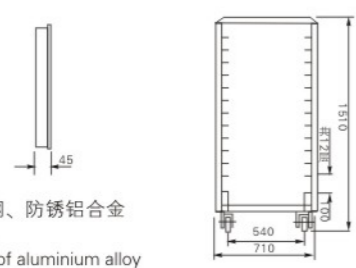
手工井字网盘  
Manual, multi-square mesh plate



一次成型压制盘  
Once shaping pressed plate



定型压制烘盘 材质: 不锈钢、防锈铝合金  
Shaped Pressed Bading-Plate  
Material: stainless steel, rustproof aluminium alloy



定型烘车 材质: 不锈钢、A3钢  
Shaped Baking Cart  
Material: stainless steel, A3 steel



轴流风机 Axial fan

## YZG/FZG 系列真空干燥机 YZG/FZG Series Vacuum Tray Dryer



### 原理 Principle

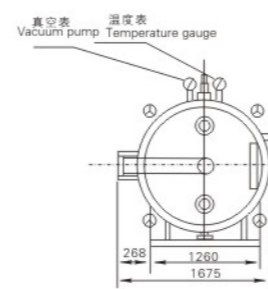
所谓真空干燥, 就是将干燥物料处在真空条件下, 进行加热干燥, 如果利用真空泵进行抽气抽湿, 则加快了干燥速率。  
注: 如采用冷凝器, 物料中的溶剂可通过冷凝器加以回收; 如采用SK系列水环真空泵, 可不用冷凝器, 节省能源投资。

It is well known that vacuum drying is to put raw material under the state of vacuum for heating and drying. If use vacuum to pump air and humidity out, the dry speed will be faster.

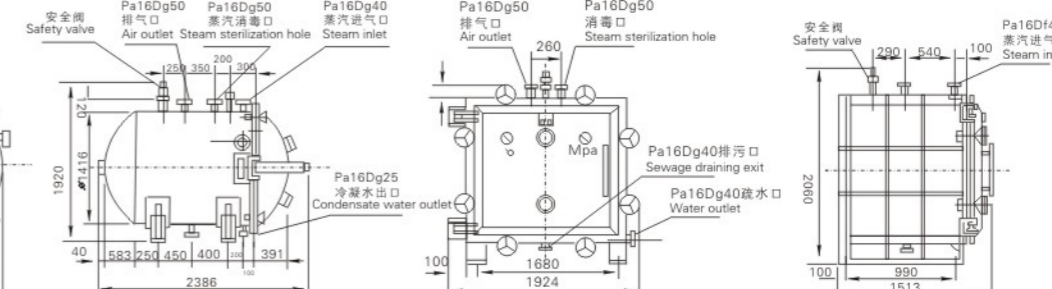
Note: if use condenser, the solvent in raw material can be recovered. If apply SK series water ring vacuum pump, condenser might be canceled and the investment and every could be saved.

### 流程图 Flow chart

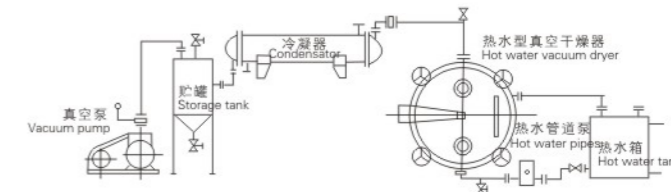
YZG-1400  
圆形真空干燥器



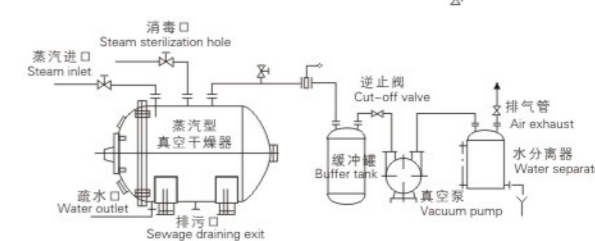
FZG-15  
方形真空干燥器



热水加热, 溶剂回收  
真空干燥系统图  
System chart of heat with hot water,  
solvent recover and vacuum drying



蒸汽加热, 溶剂不回收  
真空干燥系统图  
System chart of heat with steam heat,  
not solvent recover and vacuum drying



## YZG/FZG 系列真空干燥机 YZG/FZG Series Vacuum Tray Dryer

### 应用 Applications

适用于在高温下易分解，聚合和变质的热敏性物料的低温干燥；被广泛地采用在制药、化工、食品、电子等行业。

It is suitable for drying heat sensitive raw materials that can decompose or polymerize or deteriorate at high temperature. It is widely used in pharmaceutical, chemical, foodstuff and electronic industries.

### 特点 Features

- 真空下物料溶液的沸点降低，使蒸发器的传热推动力增大，因此对一定的传热量可以节省蒸发器的传热面积。
- 蒸发操作的热源可采用低压蒸汽或废热蒸汽。
- 蒸发器热损失少。
- 在干燥前可进行消毒处理，干燥过程中无任何不纯物混入，符合GMP要求。
- 属于静态真空干燥器，故干燥物料的形体不会损坏。
- Under the condition of vacuum, the boiling point of raw material will decrease and make the evaporation efficiency higher. Therefore for a certain amount of heat transfer, the conducting area of dryer can be saved.
- The heat source for evaporation may be low pressure steam or surplus heat steam.
- The heat loss is less.
- Before drying, the treatment of disinfection may be carried out. During the period of drying, there is no impurity material mixed. It is in conformity with the requirement of GMP.
- It belongs to static dryer. So the shape of raw material to be dried should not be destroyed.



### 技术参数 Technical parameters

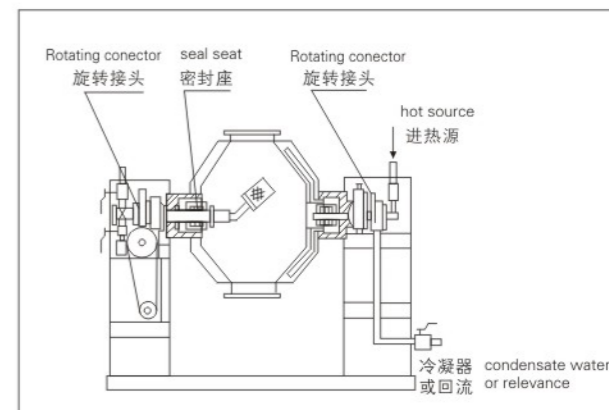
名称 Name	规格 Model	YZG-600	YZG-800	YZG-1000	YZG-1400A	FZG-10	FZG-15	FZG-20
干燥箱内尺寸 Inner size of drying chamber, mm		φ600×976	φ800×1247	φ1000×1527	φ1400×2054	1500×1060×1220	1500×1400×1220	1500×1800×1220
干燥箱外尺寸 Outer size of drying chamber, mm		1135×810×1020	1700×1045×1335	1693×1190×1500	2380×1675×1920	1924×1720×1513	1513×1924×2060	1924×2500×1513
烘架层数 Layers of baking support		4	4	6	8	5	8	12
层间距离 Interval, mm		81	82	102	102	122	122	122
烘盘尺寸 Size of baking tray, mm		310×600×45	520×410×45	520×410×45	460×640×45	460×640×45	460×640×45	460×640×45
烘盘数 Quantity of baking tray		4	8	12	32	20	32	48
烘架管内使压 Working pressure inside the pipe of baking support, MPa		≤0.784	≤0.784	≤0.784	≤0.784	≤0.784	≤0.784	≤0.784
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110℃时, 水的汽化率 Under the condition of -0.1 Mpa and 110℃, evaporation rate of water, kg/m <sup>2</sup> ·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 condenser is used, Model, and power of vacuum pump, kw		2X-15A 2KW	2X-30A 3KW	2X-30A 3KW	2X-70A 5.5KW	2X-70A 5.5KW	2X-70A 5.5KW	2X-90A 2KW
不用冷凝器时, 真空泵型号, 功率 When condenser is not used, Model, and power of vacuum pump, kw		SZ-0.5 1.5KW	SZ-1 2.2KW	SZ-1 2.2KW	SZ-1 2.2KW	SZ-2 4KW	SZ-2 4KW	SZ-2 5.5KW
干燥箱重量 Weight of drying chamber, kg		250	600	800	1400	1400	2100	3200

上述数据，仅供参考，如有特殊要求，本厂提供设计，咨询服务。  
The above mentioned data is for reference only. If having special requirements, the factory can provide the service of consultation and design.

## SZG 系列双锥回转真空干燥机 SZG Series Conical Vacuum Dryer

### 原理 Principle

- 在密闭的夹层中通入热能源(如热水、低压、蒸汽或导热油)，热量经内壳传给被干燥物料。
- 在动力驱动下，罐体作缓慢旋转，罐内物料不断地混合，从而达到强化干燥的目的。
- 物料处于真空状态，蒸汽压下降使物料表面的水份(溶剂)达到饱和状态而蒸发了，并由真空泵及时排出回收。物料内部的水份(溶剂)不断的向表面渗透、蒸发、排出，三个过程不断进行，物料在很短的时间内达到干燥目的。
- Heat source (for example, low pressure steam or thermal conduct oil) pass through the sealed jacket. The heat will be transmitted to raw material to be dried through inner shell;
- Under driving of power, the tank is rotated slowly and the raw material inside it is mixed continuously. The purpose of reinforced drying can be realized;
- The raw material exists in vacuum. The drop of steam pressure makes the moisture (solvent) at the surface of raw material become saturation and will evaporate. The solvent will be discharged through vacuum pump and recovered in time. The inner moisture (solvent) of raw material will infiltrate, evaporate and discharge continuously. The three processes are carried out unceasingly and the purpose of drying can be realized within a short time.



### 概述 Descriptions

SZG双锥回转真空干燥机是我厂在结合国内同类产品技术所开发新一代干燥装置，SZG双锥回转真空干燥机具备皮带、链条两级弹性联结方式，因而设备运行平稳。特别设计的工装，充分体现了两支轴的良好同心，热媒及真空系统均采用可靠的美国技术的旋转接头。在此基础上，我们开发了SZG-A，它既可无级调速，又能进行恒温控制。

作为专业干燥设备制造厂，我们以每年百余台服务于用户，本厂产品从高温导热油为热媒介质、中温蒸汽及低温热水一应俱全。干燥粘性物料时，本厂将在罐内为您特别设计“抄板”机构或设置滚珠。

SZG Series Conical Vacuum Dryer is a new generation drying device developed by our factory on the basis of combining the technology of similar equipment. It has two connecting ways, i.e. belt or chain. Therefore it is stable in operation. The special design guarantees two shafts realize good concentricity. Heat medium and vacuum system all adapt reliable rotating connector with the technology from USA. On this basis, we also developed SZG-A. It can carry out stepless speed change and constant temperature control. As a professional factory in drying industry, we supply hundred sets to the customers every year. As for heat medium, it may be thermal oil or steam or hot water. For drying the adhesive raw material, we have designed specially a stirring plate buffer for you.

### 特点 Features

- 油加热时，采用自动恒温控制，可以干燥生化制品和矿物原料，温度可在20~160℃之间。
- 热效率高，比一般烘箱提高2倍以上。
- 间接加热，物料不会被污染，符合"GMP"要求。设备维修操作简便，易清洗。
- When oil is used to heat, use automatic constant temperature control. It can be used for drying biology products and mine. Its temperature of operation can be adjusted form 20~160 °C .
- Compared to ordinal dryer, its heat efficiency will be 2 times higher.
- The heat is indirect. So the raw material can not be polluted. It is in conformity with the requirement of GMP. It is easy in washing and maintenance.

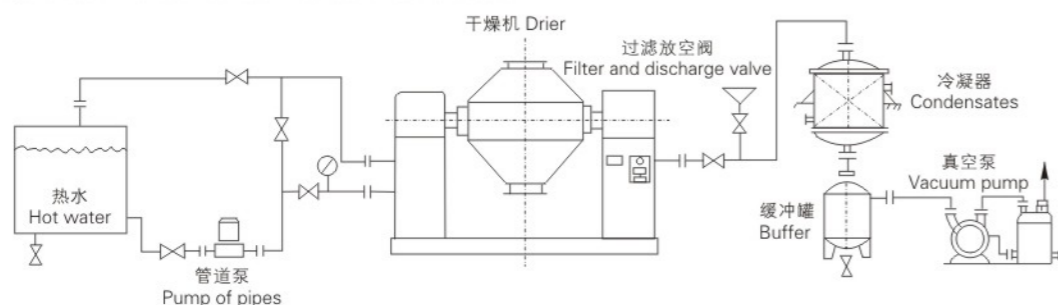
## SZG 系列双锥回转真空干燥机 SZG Series Conical Vacuum Dryer

### 应用 Applications

适用化工、制药、食品等行业的粉状、粒状及纤维状物料的浓缩、混合、干燥及需低温干燥的物料(如生化制品等),更适用于易氧化、易挥发、热敏性、强烈刺激、有毒性物料和不允许破坏结晶体的物料的干燥。  
It is suitable for the raw materials that need to concentrate, mixed and dried at low temperature (for example, biochemistry) products in chemical, pharmaceutical and foodstuff industries. Particularly it is suitable for the raw materials that are easy to be oxidized, volatilized and have heat sensitivity and is toxic and not permitted to destroy its crystal in drying process.

### 安装示意图 Schematic of installation

推荐的工艺安置示范: 溶剂回收工艺安置  
example of recommended installation: installation of solvent recover.



### 技术参数 Technical parameters

项 目 item	单位	机 型 spec										
名称 name	unit	100	200	350	500	750	1000	1500	2000	3000	4000	5000
总容积 total volume	L	100	200	350	500	750	1000	1500	2000	3000	4000	5000
工作容积 working volume	L	50	100	175	250	375	500	750	1000	1500	2000	2500
加热面积 heating area	m <sup>2</sup>	1.16	1.5	2	2.63	3.5	4.61	5.58	7.5	10.2	12.1	14.1
转速 speed	rpm	6						5	4	4	4	
功率 power	kW	0.75	1.1	1.5	1.5	2	3	3	4	5.5	7.5	7.5
回转高度 rotating height	mm	1810	1910	2090	2195	2500	2665	2915	3055	3530	3800	4180
整机重量 total weight	Kg	825	1050	1350	1650	1800	2070	2250	3000	4500	5350	6000
罐内设计压力 design pressure inside the tank	Mpa	-0.09~0.096										
夹层设计压力 design pressure of jacket	Mpa	0.3										

电机可根据用户要求选配调速电机, 转速为0-6rpm  
本机最大容积可设计为10000L

## ZB 系列真空耙式干燥机 ZB Series Vacuum Paddle Dryer



### 应用 Applications

- 医药、食品、化工等行业进行以下物料干燥。
- 适用于浆状、膏糊状、粉状物料。
- 要求低温干燥的热敏性物料。
- 易氧化、易爆、强刺激、剧毒物料。
- 要求回收有机溶剂的物料。
- The materials from such as the medicine, food, chemical industry, etc. can be dried.
- Suitable for pulpiness, paste-like mixture or powder raw material.
- Temperature sensing material requiring the low temperature to be dried.
- Raw materials that are easy to oxidize or explode and have strong irritative or toxic.
- Demand to retrieve of the organic solvent.

### 特点 Features

- 本机采用夹层加热同时进行内搅拌, 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。
- Adopts combination heating way of jacket and inside mixing, its heating conducting area is large, thermal efficiency is high.
- Being installed stirrer in the machine, it makes raw material in cylinder, so the uniformity to be heated of raw materials is raised greatly.
- Being installed stirrer in the machine, pulpiness, paste-like mixture or powder raw materials can be dried easily.

### 技术参数 Technical parameters

项 目 Item	单位 unit	机 型 type									
名称 Name	单位 unit	ZB-500	ZB-750	ZB-1000	ZB-1500	ZB-2000	ZB-3000	ZB-4000	ZB-5000	ZB-6000	
工作容积 Working volume	L	300	450	600	900	1200	1800	2400	3000	3600	
加热面积 Heating area(m)	m <sup>2</sup>	3.2	4.4	5.1	6.3	8.1	10.6	12.3	14.2	16.5	
搅拌转速 Stirring revolution	rpm	8~18									
功率 Power	kw	4	5.5	5.5	7.5	7.5	11	15	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	-0.092 ~ -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。  
Notes: the evaporated amount of water its related to the characteristics of raw materials and the temperature of air in and air out. With renew products unceasingly, the related parameters will be exchanged, it does not announce in advance, pardon!

## FL 系列沸腾制粒干燥机 FL Series Fluidized Bed Granulator

### 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
- 其他行业的造粒：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。
- Phamaceutical industry: tablet, capsule, low sugar or no sugar granule of chinese medicine.
- Foodstuff: cocoa, coffee, milkpowder, juice of granulate, flavoring and so on.
- Other industries: pesticide, feed chemical fertilizer, pigment, dyestuff and so on.
- Pharmaceutical industry: power or granule material
- Coating: Granule, protecting coat of pellet, spare color, slow release film, bowel-dissolve coating, ect



### 工作原理 Principle of work

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。

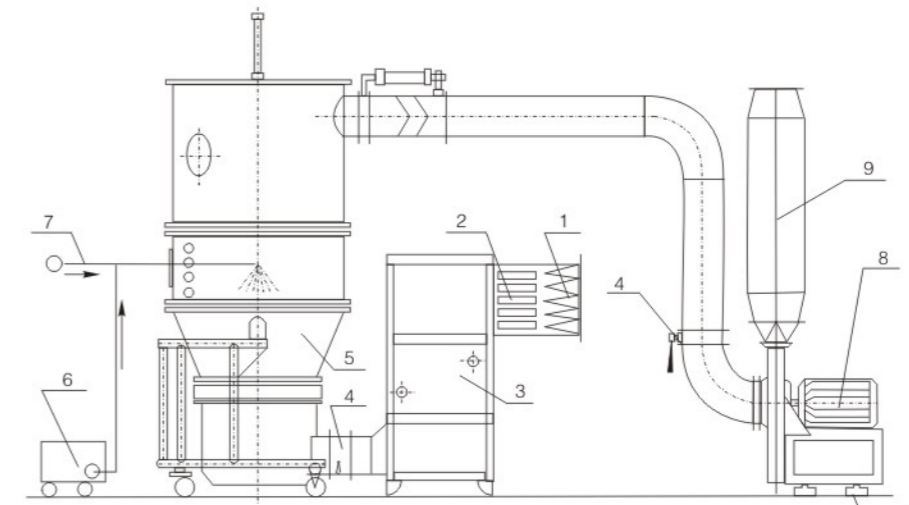
The powder granule in the container (fluidization) appear in the state of fluidization. It is preheated and mixed with clean and heated air. At the same time the solution of adhesive solvent is fogged and sprayed into the container. It makes the some particles become granulating that contains adhesive.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

### 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，设备人员不受到伤害；
- 设备无死角，装卸料轻便快速，冲洗干净，满足GMP规范。
- Through powder Granulation, the fluidity is improved and the dust is reduced;
- Through powder Granulation, its solving property is improved;
- The mixing, Granulation and drying can be completed in one step inside the machine;
- The operation of equipment is safe because the anti static filtering cloth is adapted;
- The operating personnel can not be damaged if explosion take place because there is releasing hole;
- The equipment has no dead corner. Therefore the loading and unloading are quick and light and clean. It can meet the requirements of GMP.

## FL 系列沸腾制粒干燥机 FL Series Fluidized Bed Granulator

### 工艺流程 Technological process



- |          |        |                     |                         |
|----------|--------|---------------------|-------------------------|
| 1、中效过滤器  | 6、输液泵  | 1.Mid-effect filter | 6.Liquid feeding pump   |
| 2、亚高效过滤器 | 7、压缩空气 | 2.Postfilter        | 7.Compressed air        |
| 3、加热器    | 8、引风机  | 3.Heater            | 8.Vacuum fan            |
| 4、调风阀    | 9、消音器  | 4.Distributor       | 9.Silencer              |
| 5、流化床    | 10、减震器 | 5.Fluidized bed     | 10.Vibration eliminator |

### 技术参数 Technical parameters

项目Item	单位Unit	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 <sup>3</sup> /h	1000	1200	1400	1800	3000	4500	6000	7000	8000
	风压Pressure	mmH <sub>2</sub> 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 expenditure	Kg/h	15	23	42	70	141	211	282	366	451	
压缩空气耗量Compressed air expenditure	m <sup>3</sup> /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	°C	室温-120°C范围内可调节 (adjustable at the range from room temperature to 120°C)									
作业时间Working time	min	随物料特性而定45 ~ 90 (decided in accordance with the proplerties 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)									
主机外型尺寸Size(L × W × H)	m	1.0 × 0.6 × 2.1	1.2 × 0.7 × 2.1	1.25 × 0.9 × 2.5	1.6 × 1.1 × 2.5	1.85 × 1.4 × 3	2.2 × 1.65 × 3.3	2.34 × 1.7 × 3.8	2.8 × 2.0 × 4.0	3 × 2.25 × 4.4	

## FLP 流化造粒包衣机 FLP Series Fluid-bed granulator/pelletor/coater

### 概述 Descriptions

FLP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、制丸及包衣。

FLP Granulator/Coater/Pelleter is multi-function equipment integrated spray drying—granulating—centrifugal spray coating—fluid coating—drying in one body. The machine combines various process operations. Particularly it is suitable for granulating, pelleting and coating of various varieties in pharmaceutical industry, foodstuff industry and chemical industry.etc.

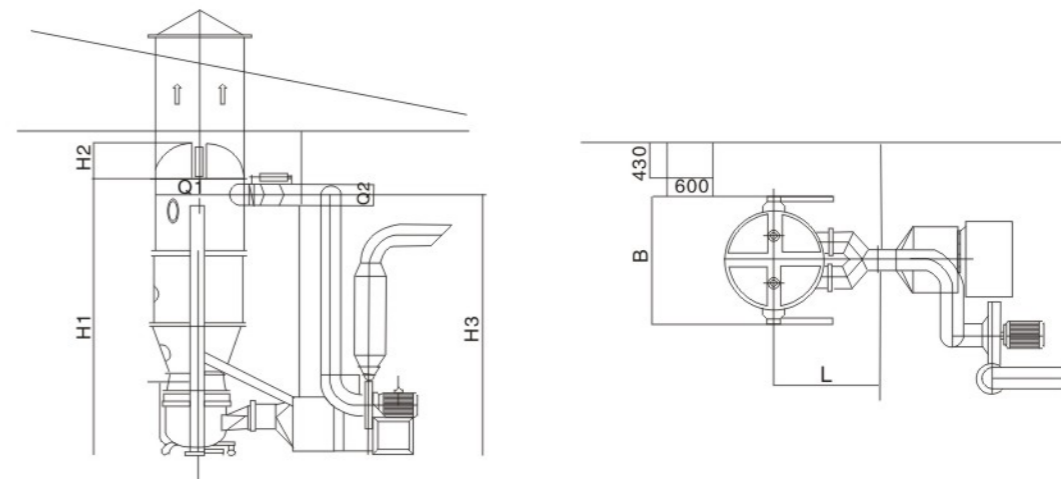
### 特点 Features

- 集制粒、制丸、包衣多种功能于一体。
- 粉体物料制粒。
- 粉体物料包衣。
- 粉体物料制丸。
- 中药喷雾制粒及包衣。
- 制备10-30目大颗粒冲剂。
- 粉体、颗粒、丸的薄、肠溶、缓控释包衣。
- 掩味、防潮、防氧化、防水、隔热、着色、隔离包衣。
- 粉状、粒状、团状物料干燥。
- Multi-function such as granulating, pelleting, coating in one machine.
- Powder material granulating.
- Powder material coating.
- Powder material pelleting.
- Chinese medicine spray drying, granulating and coating.
- Make 10-30 meshes big granule.
- Film coating of Powder, granules and pellets, enteric release, slow and control release coating.
- Taste masking, odor, moisture-proof, anti-oxidation, prevent water, heat insulation, coloration and separation coating.
- Powder, granule, agglomerate material drying.



## FLP 流化造粒包衣机 FLP Series Fluid-bed granulator/pelletor/coater

### 工艺流程 Technological process

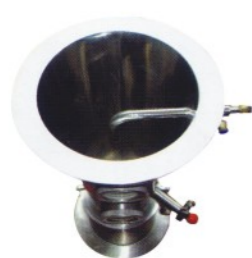


### 技术参数 Technical parameters

项目 item		机型 (FLP) Model/specifications								
名称 name	单位 unit	10	15	20	30	45	60	90	120	
容器直径 dia of container	mm	700	800	900	1000	1100	1200	1400	1500	
生产能力 productive capacity	kg/批 kg/batch	2.5-10	3-15	5.20	7.5-30	10-45	15-60	20-90	30-120	
风机功率 power of fan	kw	5.5	7.5	7.5	7.5	11	11	15	18.5	
蒸汽 steam	压强 pressure	Mpa 0.4-0.6								
	耗量 consumption	Kg/h 35 42 47 60 140 160 180 240								
压缩空气 compressed air	压强 pressure	Mpa 0.6								
	耗量 consumption	m³/min 0.6 0.6 0.6 0.9 0.9 1.1 1.3 1.5								
噪音 noise	dB	风机处理不大于75分贝 No more than 75bt separated of fan								
主机尺寸 installation size for reference	H <sub>1</sub> (mm)	2790	3350	3650	3720	3720	3850	3950	4190	
	H <sub>2</sub> (mm)	340	490	540	590	640	690	740	790	
	H <sub>3</sub> (mm)	2570	3130	3430	3500	3500	3630	3720	3975	
	Φ <sub>1</sub> (mm)	700	1000	1000	1200	1300	1400	1500	1600	
	Φ <sub>2</sub> (mm)	250	250	250	280	280	280	280	315	
	L(mm)	1250	1400	1450	1500	1550	1600	1650	1700	
	B <sub>1</sub> (mm)	1160	1460	1560	1600	1760	1860	1960	2060	
	B <sub>2</sub> (mm)	1860	2460	2660	2860	3060	3260	3460	3660	

所有数据仅供参考，视物料情况，本公司有变更权利，并不另行通知。  
All dates are used for reference only. According to the condition of material our factory has the right to change but not notice, pardon.

### 设备可选流化床特点 Fluid beds for choose



顶喷制粒床  
Top spray granulating



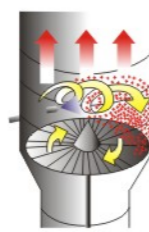
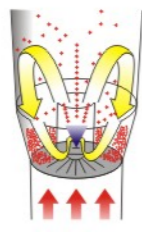
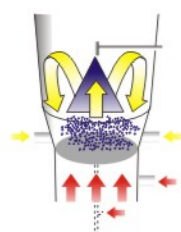
底喷包衣床  
Bottom spray coating



旋流流化床  
Turbojet granulating/coating



侧喷制丸包衣机  
Centrifugal spray pelleting/coating

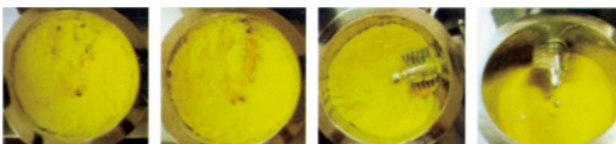




## GHL 系列高速混合制粒机 GH L Series High Speed Mixing Granulator

### 特点 Features

- 本机采用卧式圆筒构造，结构合理，无死角。
- 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 adapts a practical horizontal cylinder structure, its structure is reasonable, no dead corner.
- The driving shaft is equipped with inflatable seal. While washing, the air can be replaced by water.
- Fluidized granulating processed is used and the final granules are quite round with high fluidity.
- Compared with traditional technique, this type of machine can reduce 25% of adhesive and also shorten the drying time.
- For each batch of material, with 2 minutes' dry mixing and 1-4 minutes' granulating, the efficiency is 4-5 times higher than that of traditional technique.
- Dry mixing, wet mixing and granulating are finished inside the same sealed container, which is in conformity with the requirements of "GMP".
- The whole operation has strict safe and protective measures.



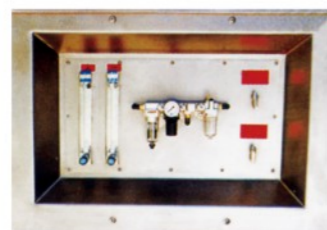
### 工作原理 Principle of work

粉体物料与粘合剂在圆筒形容器中由底部混合浆充分混合成湿润软材，然后由侧置的高速粉碎浆切割成均匀的湿颗粒。

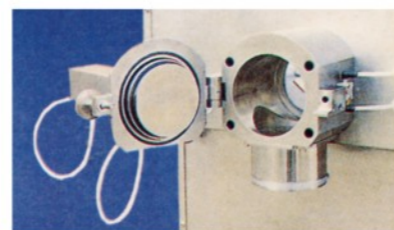
The powder raw material and adhesive in a cylinder are mixed fully at the bottom to turn into a humid soft material. Then it is crushed at a high speed and become uniform granules.



工作容器 Container

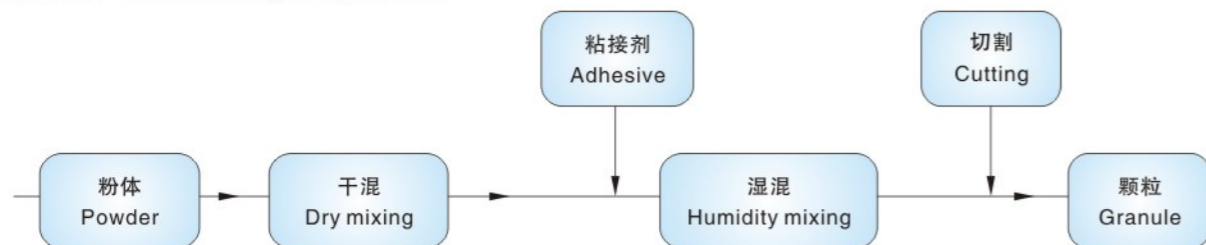


仪表 Instrument



出料口 Material outlet

### 工艺流程 Technological process

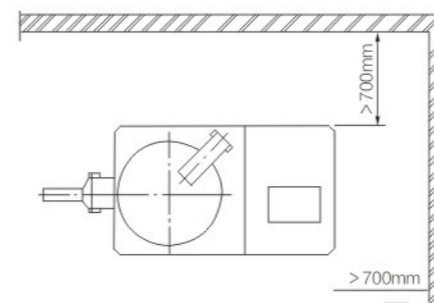


## GHL 系列高速混合制粒机 GH L Series High Speed Mixing Granulator

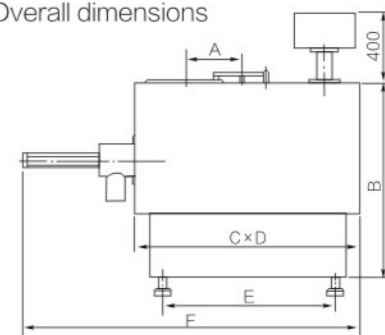
### 技术参数 Technical parameters

规格 Specification								
名称 Name	10	50	150	200	250	300	400	600
容积 Capacity (L)	10	50	150	200	250	300	400	600
产量 Output (kg/batch)	3	15	50	80	100	130	200	280
混合速度 Mixing speed (r.p.m)	300/600	200/400	180/270	180/270	180/270	140/220	106/155	80/120
混合功率 Mixing power (kw)	1.5/2.2	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	1500/3000
切割功率 Cutting power (kw)	0.85/1.1	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 Amount of compressed air(m <sup>3</sup> /min)	0.6	0.6	0.9	0.9	0.9	1.1	1.5	1.8

### 平面布置图 Drawing of layout



### 外形尺寸 Overall dimensions



型号 Type	A	B	C x D	E	F
10	270	750	1000 x 650	745	1350
50	320	950	1250 x 800	970	1650
150	420	1000	1350 x 800	1050	1750
200	500	1100	1650 x 940	1450	2050
250	500	1160	1650 x 940	1400	2260
300	550	1200	1700 x 1000	1400	2310
400	670	1300	1860 x 1100	1550	2410
600	750	1500	2000 x 1230	1750	2610

## YK 系列摇摆式制粒机 YK Series Swaying Granulator

### 概述 Descriptions

本机适用于制药、食品、化工、固体饮料等行业的制粒，将搅拌好的物料制成所需尺寸的颗粒，或将结块状物料打成小颗粒。

The machine is suitable for pharmaceutical, foodstuff, chemical, solid drink and so on industries. It can make the stirred raw materials become granule with needed size or crush the blocked raw materials into small granule.

### 技术参数 Technical parameters

型号	YK160A、B型	YK160C型
生产能力 (kg/h)	100-200	150-300
电机功率 (kw)	2.2	3
滚筒直径 (mm)	160	160
外形尺寸 (mm)	1150×680×1150	1260×750×1150
重量 (kg)	300	450

注：表中产量因物料比重目数差异其产量仅供参考。  
Notes: The output listed in the table is for reference only because of the difference of the specific gravity and mesh.



## ZL 系列旋转式制粒机 ZL Series Revolving Granulator



### 概述 Descriptions

本机主要适用于制药、化工、食品等行业。将微潮湿的粉料碾挤成颗粒，亦可粉碎碎片和干块并碾挤成颗粒。

The machine is mainly applied for pharmaceutical chemical and foods tuff industries to grind wet powder into granules as well as to grind dry block into granules.

### 技术参数 Technical parameters

型号	Model	250型	300型
生产能力(kg/h)	Capacity	100-200	120-300
制粒直径(Φ mm)	Granule diameter	0.5-3	0.5-3
功率(kw)	Power	4	5.5
重量(kg)	Weight	350	480
外形尺寸(mm)	Overall Size	700×540×1400	800×650×1400
长×宽×高	LxW×H		

### 工作原理 Principle of work

通过机械传动使碾刀和压料叶作相向旋转，压料叶成一定角度使物料向下压入碾刀，碾刀上的大角螺旋叶将物料推向筛子筒壁，再通过刀片将物料从筛孔挤出制成颗粒。

The material press sheet presses raw material with a certain angle to knives that are rolling visavis due to mechanical driving The big angle screw sheets on knives will push materials to sieve sides which will extrude them into granules.

## SET 系列双螺杆挤压造粒机 SET Series Double-Screw Extruding Granulator

### 概述 Descriptions

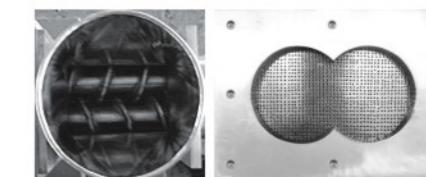
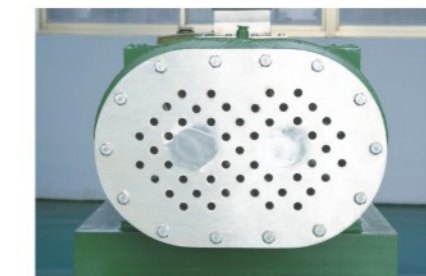
在固体与液体共存并以固体为主的分散体中，利用分散体的自粘性（或外加粘结性），通过强制方式（如挤压、重力、离心力、机械力、气流冲力等）使固体粉料基本微粒相互粘接、增大，并形成一定形状和粒度均匀、集中的颗粒群。湿法造粒成套装置主要由混合（捏和）、造粒、干燥及其辅助系统设备构成。粉料经混合（捏和）后，进入造粒机形成所需粒度的含湿产品，经干燥得到颗粒状成品，从而实现造粒的目的。

SET型系列双螺杆挤出造粒机分前出料式和侧出料式，前出料式造粒直径一般在1.5-12mm之间选择，侧出料式造粒直径一般在0.7-2.0mm之间选择，颗粒形状为圆柱形，成粒率≥95%。

In the dispersed system of coexistent composition of solid power and liquid, besides with solid phase on the former, make use of the self cohesiveness of the dispersed system (or add binder) to make basic partials of solid powder bind each other and increase to form mass granule with uniform fair-size by means of exerting force) such as extruding force, gravity, centrifugal force, impulsive force, gravity, centrifugal force, mechanical force, impulsive force air flowed.

Complete sets of equipment for wet granulation mainly consist of equipment for mixing, granulating, dry in and auxiliary system. Powder material being mixed is delivered into granulator sideband then to get end granular product through drying, thus achieving the goal of granulation.

SET Type Double-Screw Granulator has two models of front and side for material to be extrude out. Diameters of granular product granulated by front model may be normally selected between 1.5mm-12mm, and by side model can be normally selected between 0.7mm-2.0mm. Granules are cylindrically shaped. The rate of end product is equal to more than 95%.



加料口  
feeding hole

出料口  
discharging hole

### 技术参数 Technical parameters

型号 type	螺杆直径 screw dia	电机功率 power(kw)	转速 revolution (rpm)	外形尺寸 overall size L×D×H(mm)	设备重量 weight(kg)
SET-100	100	7.5	11~110	2000×500×1000	810
SET-140	140	15	11~110	1920×800×1430	810
SET-180	180	22	11~110	3000×870×880	810

## 新型药用固体制剂联动生产线 The New Interlocking Production Line Of Pharmacy



### 概述 Descriptions

所有的固体颗粒生产工厂都需要得到认证，都面临药品生产净化化的问题。现在越来越多的固体颗粒制药企业注意到是否有生产适应性、连续性、易操作和易清洁等特点的生产设备。在此前提下，设备生产企业在原有分散设备的基础上，结合药企的生产要求，提出固体颗粒生产模块化的设计理念。

●在当今发达国家，制药设备模块化设计是一个常见的概念，由于我们国家处于起步阶段，模块化设备必然会与传统制药理念发生碰撞，需要人们理念的转变。尤其在我国的传统中药领域迫切需要注入新的理念，解决中药生产中的实际问题。

●根据不同的生产工艺，模块化设备可以进行不同的模块调整，如：片剂工艺分为前磨粉模块（包括粉碎机，筛粉机等），混合制粒模块（包括总混机、湿法制粒、湿法整粒机等），干燥模块（沸腾干燥机等），压片模块，包装模块等。所有这些模块不仅需要考虑个别系统设置，同时也需要考虑到定量分配，打印产品码，密封，集中控制等，然后组合成整个模块系统。

●我司生产的GKG(封闭制粒干燥系统)是一种具有世界先进水平的造粒干燥系统，可以使用模块化设计在密封过程中完成制粒、干燥，避免了物料的二次污染，完全符合《优良药物制造手册》的要求。

Forced all the solid particle production factory need to get certification, are faced with the problem of pharmaceutical production of clean. Now more and more solid pharmaceutical companies to notice if there is a production of adaptability, continuity, easy to operate and easy to clean and so on the characteristic of production equipment. Under this premise, the equipment manufacturing enterprises on the basis of the original scattered equipment, combined with drug firms production requirements, solids production modular design concept is put forward.

Forced in the developed countries, pharmaceutical equipment is a common concept of modular design, due to our country in its infancy, modular equipment will inevitably collide with the traditional pharmaceutical concept, need people to the idea of change. Especially in the field of our traditional Chinese medicine (TCM) is an urgent need to inject new ideas, to solve the practical problems in the traditional Chinese medicine production.

Podesta, according to the different production processes, modular equipment can adjust different modules, such as: flour before tablet process is divided into modules (including grinder, sifting machine, etc.), mixed system kernel module (including total, wet mixing machine, granulator granulation machine, etc.), dry module (boiling dryer, etc.), tableting module, packaging module, etc. All these modules need to take into account not only the individual system Settings, at the same time also need to consider the quantitative distribution, print the product code, seal, centralized control, etc., and then assembled into the whole module system

Forced the our company production of GKG grain drying system (closed system) is a kind of granulation and drying system with the advanced world level, can be done using modular design in the process of sealing granulating, drying, avoid the secondary pollution materials, fully meet the requirements of "good medicine manufacturing manual".

## EYH 系列双臂传动二维运动混合机 EYH Series Two Dimensional Mixer

### 应用 Application

本机广泛用于医药，化工，食品，染料，饲料，化肥，农药等行业。尤其适用于大吨位(1000L-20000L)各种固相物料的混合。

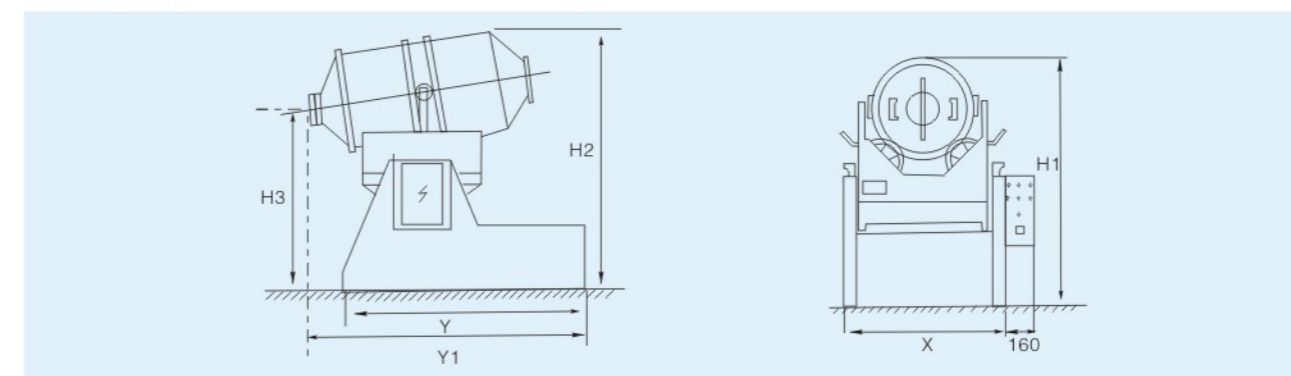
本机混合筒在转动的同时又参与摆动，使筒中物料得以充分混合，使该机具有混合迅速，混合量大，出料便捷等特点。

The mixers are widely used in pharmaceutical, food, dye, feed, chemical fertilizer and pesticide industries and especially suitable for mixing various solid materials with large volume(1,000 to 12,000 litres).

The mixing barrel swings while rotates so that the materials in the barrel can be fully mixed. Because the discharge port of the barrel is out of the barrel centreline, the mixer features quick mixing and discharging, as well as high volume mixing capacity.



### 外形结构图 Overall schematic drawing



### 技术参数 Technical parameters

型号 Model	料筒容积 Barrel Volume (L)	最大装料容积 Loading capacity (L)	最大装料量 Max loading weight(Kg/批)	旋转/摇摆 (r/min)	电机总功率 Total motor Power (Kw)	外形尺寸 Overall dimensions X×Y×H3×H2×H1 (mm)	Y1 (mm)	筒体直径 (mm)	总重量 Total weight (Kg)	料筒重量 Barrel weight (Kg)
EYH-300	300	180	90	17.5/11	1.3	975×905×825×1650×1550	1900	600	340	60
EYH-600	600	360	180	15/9	3	1145×1105×950×1900×1750	2200	750	600	140
EYH-800A	800	480	240	11/6.4	3	1300×2000×925×2050×1850	2800	820	1200	200
EYH-1000A	1000	600	300	8/5	3	1380×2450×900×2050×1900	3050	900	1300	240
EYH-1500A	1500	900	450	8/5	4.4	1480×2250×1100×2350×2200	3300	1000	1750	320
EYH-2000A	2000	1200	600	8.3/4.7	5.2	1640×2630×1080×2450×2300	3500	1130	1900	430
EYH-3000A	3000	1800	900	6.8/3.8	8	1890×2750×1180×2750×2570	3900	1300	3500	620
EYH-4000A	4000	2400	1200	6.8/3.8	9.5	1970×3490×1230×2900×2720	4700	1400	4100	800
EYH-5000A	5000	3000	1500	6.7/3.8	9.5	2100×3600×1380×3200×3000	5000	1500	5500	900
EYH-6000A	6000	3600	1800	5.6/3	13	2240×3790×1430×3400×3150	5200	1600	6100	1100
EYH-8000A	8000	4800	2400	4.5/2.7	13	2450×4350×1700×3850×3550	5700	1800	9000	1450
EYH-10000A	10000	6000	3000	3.8/2.2	18.5	2630×4900×1630×4050×3650	6300	1900	10000	1700
EYH-12000A	12000	7200	3600	3.8/2.2	18.5	2730×5200×1800×4450×4050	6600	2020	13000	2000
EYH-15000A	15000	9000	4500	3.2/2	22	3000×5280×2020×4650×4350	6700	2300	15000	2500
EYH-20000A	20000	12000	6000	3.2/1.9	30	3250×5550×2100×5000×4650	7500	2500	18000	3100

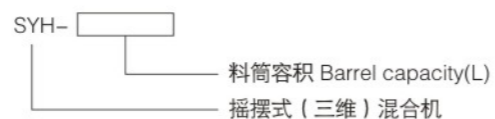
注：装料重量是按物料假比重0.5克/厘米<sup>3</sup>计算。Note: the loaded weight will be calculated in accordance with 0.5g/cm<sup>3</sup> of specific gravity. 本说明内容仅供参考，因设备更新改进较快，敬请以最新资料为准；特殊要求，另行约定。

## SYH 系列摇摆式 ( 三维 ) 混合机 SYH Series Three Dimensional Mixer



### 应用 Application

- 该机用于制药、化工、食品、轻工、电子、机械、矿冶、国防工业以及各科研单位的粉状、颗粒状物料的高均匀度混合。
- 物料无离心力作用，无比重偏析及分层、积聚现象，各组分可有悬殊的重量比，混合率达99.9%以上，是目前各种混合机中的一种较理想产品。
- 装料率大，最高可达80%(普通混合机仅为40%)，效率高，混合时间短。
- 筒体各处为圆弧过渡，并经过精密抛光处理，达到GMP要求。
- The mixers are suitable for mixing powder and granulate materials in pharmaceutical, chemical, foodstuff, light industrial, electronic, machinery, mining, metallurgical and national defence industries, featuring high evenness mixing.
- Because the mixing barrel moves in multiple directions, there is no centrifugal force acting on the material, as well as no phenomena of gravity segregation, delamination and accumulation of materials so that the mixing rate can be up to 99.9 percent for the materials with big difference in terms of specific gravity. Therefore, it is an ideal product currently compared with other various mixers.
- The barrel has high loading rate(max. 80 percent, however, only 40 percent for the conventional mixers), so that it features high efficient and short mixing time.
- The barrel transitional radius everywhere, which has been super finished.



例：SYH-100表示料筒容积为100升的三维运动混合机  
Example:SYH-100 means 3-Dmixer with barrel capacity of 100 litres.

### 原理 Principle

装料的筒体在主动轴的带动下，作周而复始的平移转动和翻滚等复合运动，促使物料沿着筒体作环向、径向和轴向的三维复合运动，从而实现多种物料的相互流动、扩散、积聚、掺杂，达到均匀混合的目的。

Driven by the driving shaft, the barrel with the materials loaded performs cycling compound movements of translation and tumbling, which make the materials move annularly, radially and axially in the body, thus achieving mutual flow, spread, accumulation and mixing of materials for the purpose of fully mixing.

### 技术参数 Technical parameters

型号Model	SYH-5	SYH-10	SYH-15	SYH-20	SYH-50	SYH-100	SYH-200	SYH-400	SYH-600	SYH-800	SYH-1000	SYH-1200	SYH-1500
料斗容量 ( L ) Barrel capacity	5	10	15	20	50	100	200	400	600	800	1000	1200	1500
最大装料容积 ( L ) Max Loading capacity	4	8	12	16	40	80	160	320	480	640	800	960	1200
最大装料重量 ( Kg ) Max loading weight	2.5	5	7.5	10	25	50	100	200	300	400	500	600	750
电机功率 ( Kw ) Motor power	0.55	0.55	0.75	0.75	1.1	1.5	2.2	4	5.5	7.5	7.5	11	11
外形尺寸 ( mm ) Overall dimensions	深 L	720	850	900	1000	1400	1700	1800	2100	2400	2600	2650	3100
	宽 W	650	700	750	800	1000	1200	1400	1800	2200	2380	2500	2850
	高 H	950	1050	1100	1150	1200	1500	1600	1950	2350	2500	2600	2930
整机重量 ( Kg ) Total weight	150	180	200	250	300	500	800	1200	1500	2000	2500	3000	3500

注：装料重量是按比重0.5克/厘米<sup>3</sup>计算。本说明内容仅供参考；特殊要求，另行约定。  
Note: the loaded weight will be calculated in accordance with 0.5g/cm<sup>3</sup> of specific gravity.

## VHJ 型系列混合机 VHJ Series Mixer



### 概述 Description

本机适用于制药、化工、食品等行业两种以上干粉状、颗粒状物料的混合。

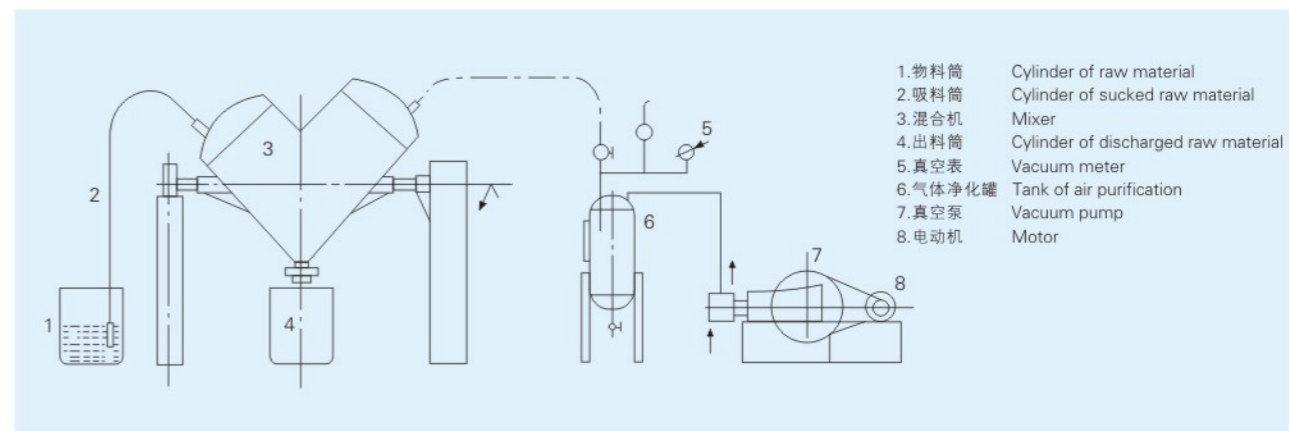
该机混合筒结构独特，混合效率高、无死角，采用不锈钢材料制作，内外壁抛光处理，外形美观，混合均匀，适用面较宽，并能根据用户的要求配套强制搅拌机，以适合较细的粉粒、块状、含有一定水份的物料混合之用。

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

The structure of this machine is unique. Its mixing efficiency is high and no dead corner. It is made of stainless steel. Its inner and outer wall is processed through polishing. Its appearance is beauty.

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



### 技术参数 Technical parameters

型号规格 Model and specification	0.18	0.3	0.5	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6
生产能力 Productive capacity (kg/time)	72	120	200	400	600	800	1000	1200	1600	2000	2400
配备真空泵型号 Model of vacuum pump	W2	W2	W2	W3	W3	W3	W3	W4	W4	W4	W4
进料时间 Time of raw material fed in (min)	3-5	3-5	4-6	6-9	6-10	8-13	8-15	8-12	10-15	15-20	18-25
混合时间 Mixing time (min)	4-8	6-10	6-10	6-10	6-10	6-10	6-10	8-12	8-12	8-12	8-12
全容积 Total volume (m <sup>3</sup> )	0.18	0.3	0.5	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0
搅拌速度 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	7.5	7.5	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

## WLDH 系列卧式螺带混合机 WLDH Series Horizontal Ribbon Mixer

### 原理 Principle

该机由容器、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向两侧输送,形成对流混合。容积可做成圆形,以便夹套用于反应、干燥。

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 converge is the material to the centre front 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 cubage can be made into rotundity, so the jacket can be played in reaction and drying.

### 特点 Features

装载系数大、设备占地面积小。  
Big coefficient of loading, small occupied area.



### 技术参数 Technical parameters

型号规格 Model & Specs m	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-10
一次混合 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 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 Dead Weight Kg	420	850	1060	1790	1900	2750	3500	4280	5300	6800	7800

上述产品按客户要求由A<sub>3</sub>钢或不锈钢制造。  
The above-mentioned products can be made in A<sub>3</sub> steel or stainless steel acc. To customer's requirements.

## GHJ系列立式高速高效混合机 GHJ Series Of Vertical Speed, High Efficiency Mixer

GHJ型立式高速混合机针对粉体或低湿物料特别设计,混合高效、均匀、无死角;

本机物料接触部分均采用不锈钢制作,搅拌轴设有密封装置,能有效防止串料,保障轴承及各传动部件寿命。

GHJ type (vertical) high speed blender for mixing powder or powder with small moisture to design. It is a new type high-efficiency, regular and no died angle machine.

The contact parts materials are all stainless steel. The stirring shaft with sealing device to avoid material swap and guarantee bearing and driving medium life.



### 技术参数 Technical parameters

型号	工作容量	搅拌重量 (KG/次)	装机功率	外型尺寸 (MRO)
GHJ-350	350	150	13.2	1500×1000×1400
GHJ-400	500	300	21.5	1600×1100×1400
GHJ-850	850	400	26	1800×1200×1500

注:表中产量因物料比重目数差异其产量仅供参考。  
Notes:The output listed in the table is for reference only because of the difference of the specific gravity and mesh.

## DSH 系列锥形双螺杆螺旋混合机 DSH Series Double-screw Conical Mixer

### 概述 Description

由螺旋的公、自转使物料在锥体内产生复合运动,主要产生四种运动形式:

1. 螺旋沿壁公转,使物料沿锥壁作圆周运动;
2. 螺旋自转使物料自锥底沿螺旋上升;
3. 螺旋的公、自转复合运动使一部分物料被吸收到螺旋圆柱面内同时受螺旋自转的离心力作用使螺旋圆柱面内的一部分物料向锥体径向排放;
4. 上升的物料受自身重力作用下降。四种运动在混合机内产生对流、剪切、扩散、从而达到快速均匀混合的目的。

The material is made to conduct a compound motion in the cone because of the rotation and revolution of the screws. The effected motions include:

1. The revolution of the screw along the wall making the material conduct a circumferential motion;
2. The rotation of the screw making the material rise along the screw from the cone bottom;
3. The compound motion of the rotation and revolution of the screws making partial, material be absorbed into the screw cylindroid meanwhile, under the action of centrifugal force, the partial material in the screw cylindroid discharges radially.
4. The risen material drops under its sole weight. The four kinds of motions effect convection, shearing, diffusion in the cone, thus quick and even mixing can be achieved.

### 特点 Features

- ◇可加装飞刀,喷淋雾化装配,满足特殊工艺要求。
- ◇出料阀有手动、气动两种方式。
- ◇特殊物料可加大电机功率(加重型)。

◇ This model of machine can be equipped with single screw, double screws, tri-screws.

◇ It can be equipped with flying-entter aditionally, so as to meet the requivements for special technology.

◇ The discharge valve adopts two ways, one is manual or the other is pneumatical.

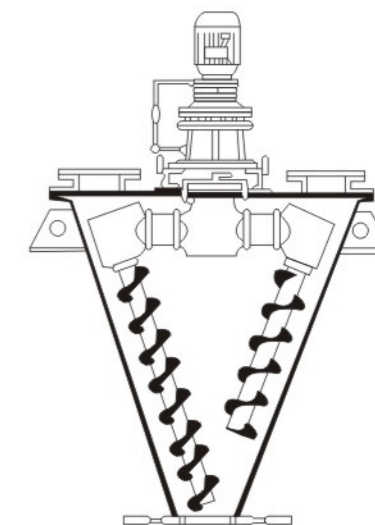
The power of motor can be enlarged for special material(strengthening type).



### 应用 Application

应用于化工、医药、农药、染料、石油、冶金、建材等粉体与粉体(固-固),粉体与液体(固-液),液体与液体(液-液)混合、反应、干燥、冷却。

It is suitable for chemical industry, pharmaceutical industry pesticide, dyestuff, petroleum industry, metallurgical industry, construction material and etc. Such as in the mixing, reaction, drying, cooling of powder and powder(solid-solid), powder and liguid (solid-liguid), liguid and liguid (liguid-liguid).



## WZ 系列无重力混合机 WZ Series Zero-Gravity Mixer



### 特点 Features

- 混合精度高，速度快，能耗低，可密封操作。
- 气动、电动、手动出料方式
- 筒盖上可布置雾化装置以实现固液混合
- The equipment can run in an enclosure, with high precision, high speed, low energy consumption.
- Pneumatically, electrical and manual discharging method.
- The atomizing device can be distributed on the cylinder cover to realize the solid-liquid mixing.

### 技术参数 Technical parameters

型号规格 model & specs(m³)	WZ-0.05	WZ-0.1	WZ-0.3	WZ-0.5	WZ-1	WZ-2	WZ-3	WZ-4	WZ-6
一次混合 mixed amount/batch(kg)	24~30	40~60	120~180	200~300	400~600	800~1200	1200~1800	1600~2400	2400~3600
装机功率 equipped power(kW)	2.2	3	4~5.5	5.5~7.5	7.5~15	15~18.5	18.5~22	22~30	30~37
设备重量 weight(kg)	250	360	750	880	2100	2740	3800	5100	6600

注：以上产品材质分碳钢C、不锈钢P。  
Note: The above-mentioned products can be made in carbonaceous steel C or stainless steel P.

## LDH 系列犁刀混合机

### LDH Series Coultter Mixing Machine

### 概述 Description

该机型由传动机构、卧式筒体、犁刀、飞刀四部分组成；物料在犁刀作用下沿筒壁作轴向流动，当物料流经飞刀时被高速旋转的飞刀抛洒，从而在较短时间内达到均匀混合。

This machine is composed of transmission apparatus, horizontal cylinder, colter flying cutter; under the action of colter, the material conducts a turbulent flow circumferentially along the cylinder wall, and the materials is thrown and sprinkled by the rotating flying-cutter at a high speed when it flows through the flying cutter, thus the material is mixed evenly in a shorter time.

### 特点 Features

- 混合时间短、对粒度、密度差异大的物料混合有较好的适应性。
- 结构特点特别适合加液混合和造湿粒，粒径在0.3-3mm之间。
- The mixing time is short. It has a better adaptability to the mixing of the materials, which has large differences in size and specific gravity.
- Its construction feature is that it is especially suitable for liquid adding mixing or granulating wet particle, the size is between 0.3-3mm.



### 技术参数 Technical parameters

型号规格 Model & Specs(m³)	LDH-0.1	LDH-0.3	LDH-0.5	LDH-1	LDH-2	LDH-4	LDH-6	LDH-8	LDH-10	LDH-12	LDH-15
一次混合 Mixed amount/batch(kg)	40~60	120~180	200~300	400~600	800~1200	1600~2400	2400~3600	3200~4800	4000~6000	4800~7200	6000~9000
装机功率 Equipped power(kw)	6	8.4	9.9	23	30.5	38	38	46	53	65	82.5
设备重量 Dead Weight(kg)	430	950	1100	1800	2520	3220	6750	7200	7500	8500	9200

上述产品按客户要求由A<sub>1</sub>钢或不锈钢制造。  
The above-mentioned products can be made in A<sub>1</sub> steel or stainless steel acc. To customer's requirements.

## 30B 系列高效粉碎机(组) 30B Series High Effect Grinding Machine(set)

### 概述 Description

本机(组)适用于医药、化工、食品、农药等行业脆性物料的粉碎，用途极为广泛。

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



### 技术参数 Technical parameters

型号 Model	20B/20B机组(set)	30B/30B机组(set)	40B/40B机组(set)	60B/60B机组(set)
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/min)	4500	3800	3400	2800
进料粒度 Size of fed material (mm)	6	10	12	15
粉碎细度(目) Grinding size (mesh)	2~120	2~120	2~120	2~120
电机功率 Power of Motor (kw)	4	5.5	7.5	15
吸尘风机功率 Fan power	0.75	0.75	1.1	2.2
重量 Weight (kg)	250	320	550	680

注：因物料差异及要求目数不同，表中产量仅供参考。  
Notes: the outputs in list are only for reference, due to the difference of material and the wanted sizes.

## WF-30B 中草药粉碎机组

### WF-30B China Herb High Speed Grinder

### 应用 Application

该机具有技术性能稳定、产量高、外形美观，适用范围广等特点。本机对于粉碎干燥纤维性物料具有较理想的效果。与国内其他机型相比，制品温度低，粒度均匀，特别适用于食糖、塑料粉末、中药等热敏性物料的粉碎。

The machine has stable technical performance, high production capacity and beautiful. It has large of application. It can get very ideal result to pulverize the drying fibre material. It is suitable for heat sensitivity materials such as sugar, plastic powder and Chinese traditional medicine.



### 技术参数 Technical parameters

型号 (model)	30B
主轴转速 (main shaft speed)	5300转/分 (rpm)
主机电机功率 (main motor power)	7.5千瓦 (kw)
关风机电机功率 (closing fan motor power)	0.37千瓦 (kw)
引风机电机功率 (draught fan motor power)	1.1千瓦 (kw)
进料粒度 (feed grain degree)	10-40mm
粉碎细度 (pulverizing fineness)	60-220目 (任意可调) - (eye will) 常规使用
粉碎能力 (pulverizing capacity)	50-250公斤/小时 (kg/h)
主机温升 (main engine temperature rising)	≤65℃ (degree)

## WF 最新高效粗粉碎机 WF Roughness Grinder

### 应用 Application

本机适用于制药、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, foodstuff industry, architecture industry and so on to crush hard raw materials including plastics, steel wire, Chinese herbal medicine, rubber and so on. It can also be as complete equipment of ring grinder and super fine grinder as the first procedure.

### 特点 Features

该机是采用立式粉碎机结构，不受物料粘度、硬度、软度等的限制，对任何物料都能起到粉碎作用。

This machine adapts vertical crushing mechanism. It can not be limited by viscosity, hardness and softness of raw materials. It has good crushing effect to all kinds of raw materials.



### 技术参数 Technical parameters

型号 type	进料粒度 (mm) inlet material diameter	出料颗粒 (mm) output diameter	产量 (kg/h) output	功率 (kw) power	主轴转速 (rpm) speed of shaft	外型尺寸 (mm) overall dimension
WF-250	≤100	0.5~20	50~300	4	940	860×650×1020
WF-500	≤100	0.5~20	80~800	11	1000	1120×1060×1050

## WFJ 系列微粉碎机

### WFJ Series Fine Grinder

### 概述 Description

该系列微粉碎机由主机、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量源源不断地排出，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、食品、药品、化妆品、染料、树脂、壳物等多种物料的粉碎及分级。

WFJ series 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 chose 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)	13.5	17.5	38
主转速 Main revolution(r/min)	4500	4480	4000
外型尺寸 Overall dimensions (L×W×H)(mm)	4200×1200×2800	4700×1250×2900	9000×1500×3800

## RLY 系列燃油、RQY燃气热风炉 RLY/RQY Series Oil Fuel, Gas Fuel Hot Air Furnace

### 概述 Description

我厂自行设计制造的 RLY 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70%~80%）。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 RLY 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 thermalefficiency (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, feedstuffs, fruits, dehydrated vegetables, Panania 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 combust or, its combustion is full and no environment pollution.

### 技术参数 Technical parameters

型号 Type	燃烧器型号 Combustion device type	燃油量 Oil combustion (kg/h)	供热量 Heat supply capacity (10 <sup>3</sup> kcal/h)	外形尺寸 Overall dimension L×W×H (mm)	热风口 Hot air hole L×W (mm)	总重 Total weight (kg)
RLY10	Y1	13~16	10	2100×1300×1600	180×200	1970
RLY20	YL3	26~32	20	2800×1400×1700	200×250	2260
RLY30	YL3	39~48	30	3400×1500×1800	250×300	3160
RLY40	YL3	52~46	40	4020×1700×1900	300×400	4750
RLY60	YL7	78~96	60	4800×1900×2100	400×500	5650
RLY100	YL8	130~160	100	5400×2100×2300	550×650	6550
RLY200	YB10	260~320	200	6000×2500×2400	750×900	7980
RLY360	YB11	468~720	360	7200×2900×2600	900×1200	9860



CHANGZHOU HAOMAI DRYING ENGINEERING CO.,LTD.

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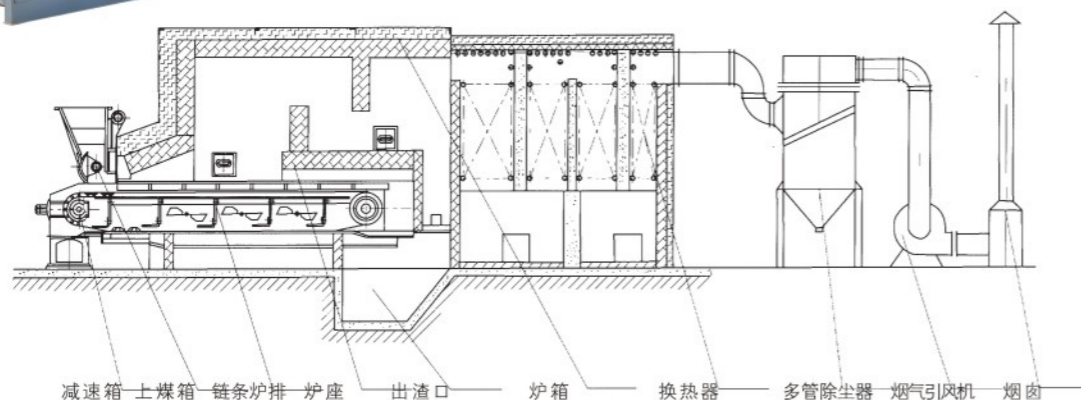
## JRML 系列链条炉排燃煤热风炉 JRML Series Coal Furnace Of Chain



### 概述 Description

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式、管式、热管式等换热器、具有输出温度高、热值大、热效率高等优点，可制备100~500℃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 choised in high-temperature palte, pipe and hot pipe. Its temperature of outlet is high, and heat factor is high and the temperature of cleaning hot air is froml 100~500℃. The technical parameters of drier is reached to advanced level in home. The drier is widly used for heating, drying and hot shapping in chemical industry, foodstuff, mineral, building industry and so on.



减速箱 上煤箱 链条炉排 炉座 出渣口 炉箱 换热器 多管除尘器 烟气引风机 烟囱

### 特点 Features

采用链条炉排，铺煤厚度均匀可调，燃烧充分，热效率高。  
自动上煤、自动出渣，操作简单，劳动强度低。  
采用膨胀节结构，避免热膨胀带来的破坏，延长设备使用寿命。  
采用多管除尘器，烟气排放，满足环保要求。

Chair fire grate, even coal thickness and readjustment, full burning and high efficiency.  
Auto-feeding coal, auto-slag-tapping, easy operation and low labor intensity.  
Expansion joint structure to avoid damaging from expansion and prolong service life.  
Multi-pipe dust-removal structure and disposal of flue-gas in conformity with requirements of environmental protection.

### 技术参数 Technical parameters

型号model	输出热量 output calorie	输出风量 output air amount	输出温度 output temperature(°C)	耗煤量 coal consumption(kg/h)	烟气引风机型号 fan type
JRML100	4.2 × 10 <sup>6</sup> kJ/h (1 × 10 <sup>6</sup> kcal/h)	由输出温度定 decided by output temperature	100~450℃	240~260	Y5-47N05 7.5kw
JRML120	5.0 × 10 <sup>6</sup> kJ/h (1.2 × 10 <sup>6</sup> kcal/h)		100~450℃	280~320	Y5-47N05 7.5kw
JRML180	7.5 × 10 <sup>6</sup> kJ/h (1.8 × 10 <sup>6</sup> kcal/h)		100~550℃	420~460	Y5-47N06 15kw
JRML240	10 × 10 <sup>6</sup> kJ/h (2.4 × 10 <sup>6</sup> kcal/h)		100~550℃	500~550	Y5-47N06 18.5kw
JRML300	12.5 × 10 <sup>6</sup> kJ/h (3 × 10 <sup>6</sup> kcal/h)		100~550℃	680~700	Y5-47N08 22kw
JRML360	15 × 10 <sup>6</sup> kJ/h (3.6 × 10 <sup>6</sup> kcal/h)		100~550℃	800~860	Y5-47N08 30kw
JRML420	17.5 × 10 <sup>6</sup> kJ/h (4.2 × 10 <sup>6</sup> kcal/h)		100~550℃	950~1020	Y5-47N08 30kw
JRML480	20 × 10 <sup>6</sup> kJ/h (4.8 × 10 <sup>6</sup> kcal/h)		100~550℃	1100~1200	Y5-47N09 45kw
JRML600	25 × 10 <sup>6</sup> kJ/h (6 × 10 <sup>6</sup> kcal/h)		100~550℃	1350~1460	Y5-48N010 55kw
JRML720	30 × 10 <sup>6</sup> kJ/h (7.2 × 10 <sup>6</sup> kcal/h)		100~550℃	1600~1750	Y5-48N010 55kw
JRML780	32.5 × 10 <sup>6</sup> kJ/h (7.8 × 10 <sup>6</sup> kcal/h)		100~550℃	1780~1900	Y5-48N010 75kw
JRML960	40 × 10 <sup>6</sup> kJ/h (9.6 × 10 <sup>6</sup> kcal/h)		100~550℃	2100~2250	Y5-47N012 75kw

# 试验 Process test

## 豪迈公司工艺、工程试验中心

Craft Project&Experimental Center of Haimai Company

### 试验装备齐全、随时可供来料试验：

Experiments well equipped, may provide the material experiment as necessary:

- LPG-5高速离心喷雾干燥机 CT-C Hot Air Circulating Drying Oven
- XSG-8快速旋转闪蒸干燥机 XSG-8 Series Spin Flash Dryer
- GFG-60高效沸腾干燥机 GFG-60 Series High-Efficiency Vertical Fluid Bed Dryer
- KJG-10空心桨叶干燥机 KJG-10 Series Paddle Dryer
- PLG1200/8盘式连续干燥机 PLG1200/8 Series Continual Plate Dryer
- HG-1000/1000滚筒刮板干燥机 HG-1000/1000 Series Cylinder and Scratch Board Dryer
- SZG-500双锥真空干燥机 SZG-500 Series Conical Vacuum Dryer
- PZG-200耙式真空干燥机 PZG-200 Series Vacuum Paddle Dryer
- CT-C-I热风循环烘箱 CT-C-I Hot Air Circulating Drying Oven
- FL-15沸腾制粒机 FL-15 Series Fluidized Bed Granulator
- GHL-10高速湿法混合制粒机 GHL-10 Series High Speed Mixing Granulator
- ZL-300旋转制粒机 ZL-300 Series Revolving Granulator
- YK160摇摆颗粒机 YK160 Series Swaying Granulator
- SET-120双螺杆挤压造粒机 SET-120 Series Double-Srew Extruding Granulator
- ZGH-350立式高速混合机 ZGH-350 Series Of Vertical Speed, High Efficiency Mixer
- 30B-C万能粉碎机 30B-C Universal Grinder

欲全面了解豪迈，请致电：0519-88908388 88905668

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