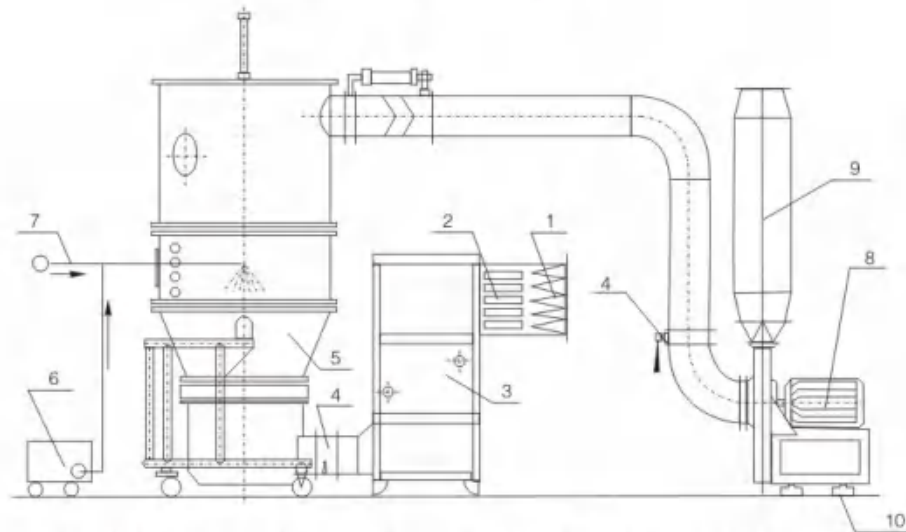


## FL Series Fluidized Granulator

### FL 系列沸腾制粒干燥机

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	9	12	42	70	141	180	282	366	451	
压缩空气耗量Compressed air expenditure		m <sup>3</sup> /min	0.3	0.35	0.6	0.6	0.9	0.9	1.1	2.0	2.4	
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 properties of raw materials)									
物料收得率Field		%	≥99									
噪声Noise		dB(A)	风机与主机隔离安装, 噪声≤75dB(A)(When installation, main machine is separated from fan)									
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 Series Fluid-bed Granulator/pelletor/coater

### FLP 多功能包衣制粒机



### Description

FLP Granulator/Coater/Pelletor 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

- 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。

### Features

- 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.

### 概述

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。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。

### 设备可选流化床特点 Fluid beds for choose



顶喷制粒床  
Top spray granulating



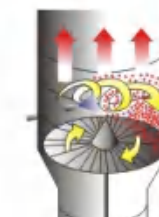
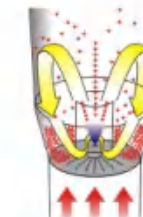
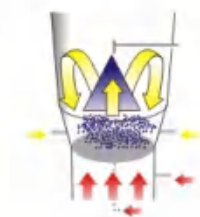
底喷包衣床  
Bottom spray coating



旋流流化床  
Turbojet granulating/coating

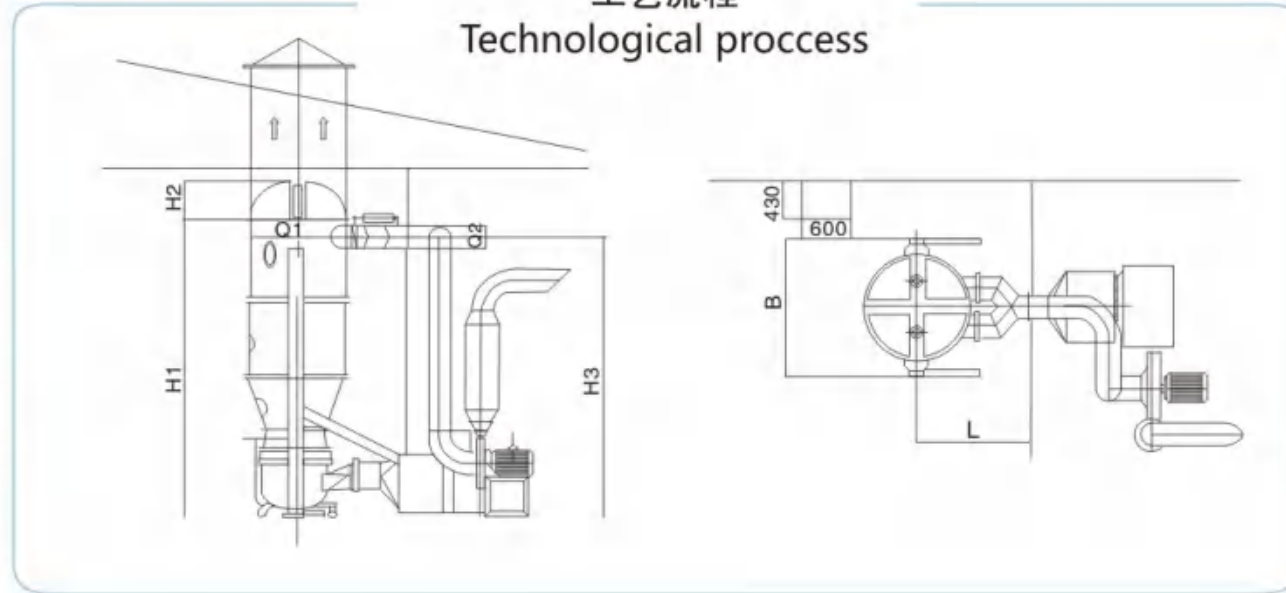


侧喷制丸包衣机  
Centrifugal spray pelleting/coating



## FLP Series Fluid-bed Granulator/pelletor/coater FLP 多功能包衣制粒机

### 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	m <sup>3</sup> /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.

## GFZL Series Dry Granulating Set GFZL 系列干法辊压式制粒机

### 概述

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

### Description

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

### 应用 Application

石油化工 Oil & chemical      生物工程 Biosynthesis  
精细化工 Fine chemical      医药 Medicine  
农药 Agrochemical      化肥 Fertilizer  
金属粉末 Metallic power      食品 Foodstuff  
矿产, 煤炭 Mine, Coal mine

### 技术参数 Technical parameters

项目 item	参数 data	型号 model	GFZL-1	GFZL-2	GFZL-3	GFZL-4	GFZL-5
轧辊直径 diameter of roller	(mm)		Φ240	Φ240	Φ300	Φ360	Φ480
轧辊有效使用宽度 width of roller	(mm)		80	160	250	360	480
轧辊转速 rolling rate of roller	(rpm)		8-20	8-20	8-20	8-20	8-20
最大成形压力 max pressure of roller	(t)		50	60	80	100	130
轧辊最大厚度 max thickness of roller	(mm)		4	5	6	8	8
轧片产量 output of pressed sheets	(kg/h)		250-500	500-900	700-2000	1000-1400	2000-7400
成品粒度 diameter of the products	(mm)		0.2-5	0.2-5	0.2-8	0.2-8	0.2-8
成品产量 output of product	(kg/h)		80-150	150-300	300-600	600-1000	1000-2000
主机功率 main motor power	(kw)		7.5	11	15	22	30
总功率 total power	(kw)		13	21	30	46	60
外形尺寸 (长x宽x高) overall dimension	(mm)		1500 × 2000 × 3800	1700 × 2000 × 4000	2000 × 2500 × 4200	2500 × 2500 × 5200	2800 × 2600 × 6000
重量 weight(t)			7	8	10	14	20

注: 1. 轧片产量以料片密度1500kg/m<sup>3</sup>, 轧辊转速20rpm计算。  
2. 成品产量以成粒量50%计算。  
3. 成品粒度通过改变破碎整粒机的筛板孔径可在较大范围调整。



在压块时, 粒状物料在两个反向旋转的辊子之间被压实, 压块可使用粘剂。

## GHL Series High Speed Mixing Granulator GHL 系列高速湿法混合制粒机



### 特点

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

### Features

- The machine adapts a practical horizontal cylinder structure.
- The driving shaft is equipped with inflatable seal. While washing, the air can be replaced by water.
- Fluidized granulating process 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.

### 技术参数 Technical parameters

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

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

### 概述 Description

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, 亦可粉碎费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.

### 原理 Principle

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筒筒壁。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.



### 技术参数 Technical parameters

型号 Model	250	300B	300D
生产能力 (kg/h) Capacity	100-200	140-400	300-600
制粒直径 (Φ mm) Granule diameter (可根据客户要求)	2-2.2	1.2-3	0.5-6
功率 (kw) Power	3	4	7.5
重量 (kg) Weight	350	400	780
外形尺寸 (mm) Overall Size 长 × 宽 × 高 L × W × H	700 × 540 × 1300	880 × 640 × 1300	1300 × 800 × 1200

## GZL High Efficiency Extruding Granulator GZL 高效旋转制粒机

### 概述 Description

本机采用特制行星减速机, 筛网和整粒刀各自相对旋转运动, 将物料在整粒刀和筛筒之间挤搓, 轻松从筛筒上的网孔中形成圆柱条状, 在筛筒外的切割刀割下形成大小均匀、长度一致的颗粒, 其颗粒的大小长度由筛筒网孔径和切割刀把数间隔来决定。



The machine uses specially star type decelerator, strainer and the granulating knife moved oppositely. Pushes the material between impeller and sieve, it could easy to get column shape product from sieve. Scrape impeller outside the sieve makes the product into uniform size, consistent length pellet, its pellets size and length are decided by size of sieve and scrape impeller.

### 技术参数 Technical parameters

型号 Type	GZL-250	GZL-360
额定产量 capacity (kg/h)	150kg/h-300kg/h	200kg/h-500kg/h
重量 Weight (kg)	600kg	800kg

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

### 概述

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。

### 技术参数 Technical parameters

型号 model	YK160A、B型	YK160C型	YK250型
生产能力 (kg/h)	100-200	150-300	300-500
电机功率 (kw)	3	4	5.5
滚筒直径 (mm)	Ø160	Ø160	Ø160
重量 (kg)	300	450	550
外形尺寸 (mm)	1150x680x1150	1260x750x1150	1400x800x1200

注：表中产量因物料比重大小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.

### Description

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.



## KZL Series High Speed Grinding Granulator KZL 系列快速整粒机

### 概述 Description

- 工作时发热小，粉尘少。
- 定子筛网由不锈钢板加工而成，不易损坏。
- 粉碎刀与筛网间隙可调。
- 可处理粘性、树胶状、热敏性和湿润物料。
- There is less heat and dust in work.
- The fixed screen is made from stainless steel and it can not damage easy.
- The gap between crush knives and screen can be adjusted.
- It can treat adhesive, glue, hot and wet raw materials.



### 应用 Application

- 本机适用于中西药、食品、化工颜料及饲料等行业中颗粒的破碎及整理。
- 经各种造粒工艺及设备所得到的颗粒形状及规格各异。将造粒后的颗粒经本机高速旋转的刀片组合切割后，经网板出，便可得到形状及规格基本一致的颗粒。
- 本机全部零件均采用不锈钢制造，表面抛光，装拆与清洗十分方便。

- This machine is suitable for crushing and processing granule of Chinese traditional medicine, Western medicine, foodstuff, chemicals, pigments, feedstuff and so on.
- The specifications and shapes of granule made by all kinds of granulating process and different granulator are different. The granule with basic similar shape and specification can be got when the granulated granule is cut by knives with high speed in this machine.
- All parts in this machine are made of stainless steel. Its assembling and disassembling and cleaning are very convenient.

### 技术参数 Technical parameters

型号 model	100	180	300
定子直径(mm)stator diameter	100	180	300
定子长度(mm)stator length	96	178	305
生产能力(kw)productivity	20-150	100-1500	500-2500
功率(kw)power	0.75	1.5	5.5
转速(rpm)speed	180-1400	175-1400	200-1400

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

### 概述 Description

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（或外加粘性），通过强制方式（如挤压、重力、离心力、机械力、气流冲击力等）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%.

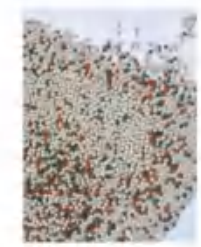
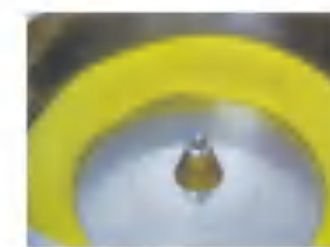
### 技术参数 Technical parameters

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

## QZL Pelletizer QZL球形抛丸机

本机是通过设置旋转离心盘、鼓风机、气动喷枪，将湿颗粒制成美丽的球丸。将前道工序做成的湿颗粒投入旋转离心盘内，启动鼓风机后再将旋转离心盘启动，使湿颗粒受到环隙空气浮力、旋转离心力、自身重力作用，呈环周绳状运动，从而形成真球度极高的球丸。

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



### 技术参数 Technical parameters

规格 spec	单位 unit	Φ230	Φ400	Φ500	Φ700	Φ1000	Φ1300
动力 power	Kw	0.75	2.2	3	3.7	5.5	7.5
能力 capacity	Kg/h	2.5-4	5-8	8-16	40-80	120-200	150-300

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