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济南卓恒膨化机械有限公司是集科、工、贸为一体的高新技术企业，致力于挤压膨化食品工艺及设备的开发、研制和生产。先后研发了数十种膨化食品机械及设备，现已成为国内外重要的专业生产厂家。

济南卓恒膨化机械有限公司座落于美丽的泉城—济南。公司拥有经验丰富的经营管理人员，优秀的工程技术人员及训练有素的技术工人，并经常与世界著名的同行企业进行交流，引进先进的产品技术和生产工艺，形成实力雄厚的技术保障体系。

公司自创业之初就秉承“卓越品质，恒久信誉”的企业宗旨和“共同合作，共同发展”的经营理念，以产品质量为基石，以技术开发为先导，全心全意，专业专注。用精良的技术，真诚的态度和完善的服务为市场提供品质卓越的产品。站在新起点、寻求新突破、实现新跨越，是时代赋予我们光荣而神圣的使命。济南卓恒膨化机械有限公司愿与广大新老客户朋友真诚携手，开拓创新，在互惠共赢的基础上共同建设美好的未来！

济南卓恒膨化机械有限公司主营产品：单螺杆挤出机，双螺杆膨化机，膨化食品机械，各类膨化食品生产线，膨化营养粉，芝麻糊生产线，麦烧，夹心米果食品生产线，面包糠生产设备，变性淀粉生产线，大豆组织蛋白生产线，玉米片，燕麦片生产线，锅巴、沙拉、妙脆角生产线，强化营养大米生产线，通心粉生产设备，宠物咬胶生产线，宠物饲料生产设备，宠物粮加工设备、电、油、气多层烤箱，大型压片机，高温烤炉，其他各种食品行业相关设备。



# ZHUOHENG EXTRUSION MACHINERY



## 卓越品质·恒久信誉

### Excellent Quality · Lasting Reputation

Jinan Zhuoheng Extrusion Machinery Co., Ltd., a shareholders-owned and operated business established more than 10 years ago, is considered as one of Chinese most respected and experienced suppliers of snack food equipment, accessories and services.

Zhuoheng has a comprehensive manufacturing program offering equipment and systems to customers in extruded snack food processing machinery and allied industries. We can supply individual items of equipment or complete factory layouts and lines, which are custom-built to meet the requirements of customers. Our spare part and service division demonstrates our continuous commitment to customers' support and after-sales service. We have successfully completed several large-scale projects from planning to completion and project management. Zhuoheng has a proven record of quality and service.

Each member of Zhuoheng offers special contributions to Zhuoheng's skill base. Skills include design, drafting and good old-fashioned common sense. With in-house design, construction, repair and service, Zhuoheng has developed a "one-stop factory" for the food machinery industry that cannot be matched due to their vertical strength. Zhuoheng's solution-based service structure takes away a lot of your frustration whether you're opening a new snack food service venture or you are a head officer needing urgent solutions.

We insist on improving the standard of products and try our best to serve our clients. Our goal is to become the biggest and best snack food processing machinery manufacturer in China. We hope our products could benefit clients from all over the world.



公司自创业之初就秉承“卓越品质，恒久信誉”的企业宗旨和“共同合作，共同发展”的经营理念，以产品质量为基石，以技术开发为先导，全心全意，专业专注。

用我们真诚努力的工作，为客户提供配制合理、性能可靠、技术专业的生产设备和方案。

动力源自于明确的目标，智慧源于不断的学习。我们始终以高科技产品为先导，以优质的服务为宗旨，竭诚为广大用户提供一流的产品，一流的质量，一流的服务。卓恒膨化机械愿与广大新老客户真诚携手，开拓创新，在互惠共赢的基础上共同建设美好的未来。



携手合作 · 相伴共赢  
Joint Cooperation And Common Development







**ZH95-I** 大型双螺杆膨化机组  
Double-screw Extrusion Unit



**ZH85-II** 大型双螺杆膨化机组  
Double-screw Extrusion Unit

### 双螺杆主机特点 Features of Double-screw Extruder

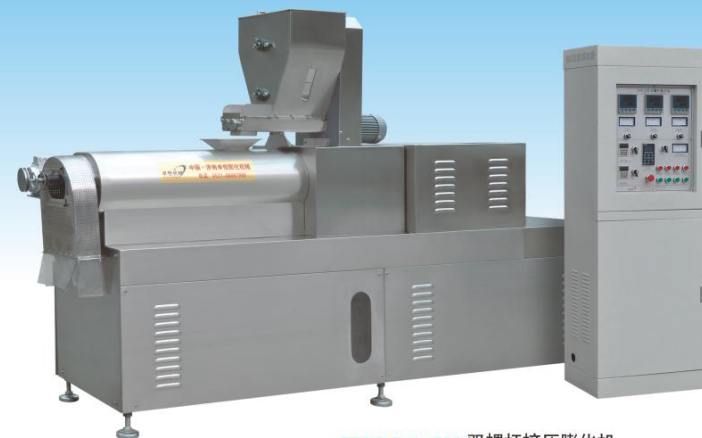
- ◎ 本机由供料系统、挤压系统、旋切系统、加热系统、传动系统、控制系统组成。
- ◎ 供料系统、驱动系统、旋切系统均采用变频调速，动力强劲，运转平稳，节省能源。
- ◎ 自动润滑，降低机械能耗，延长了使用寿命。
- ◎ 供料系统采用双螺旋强制喂料，喂料均匀、广泛。
- ◎ 螺杆采用高性能合金钢38CrMoAL，经渗氮工艺加工，强度高，耐磨，抗疲劳，使用寿命长。
- ◎ 不同螺杆长径比结构满足不同工艺要求。
- ◎ 双螺杆具有优良的自清理能力，无需拆卸清理。
- ◎ 双轴调制器，可改善物料，提高产量，节省能耗。
- ◎ 机筒采用红外线不锈钢加热圈，各区温度独立调整。
- ◎ This machine consists of feeding system, extruding system, cutting system, heating system, transmission system and control system.
- ◎ Feeding, driving and cutting system use frequency control. More powerful, stable r-unning, saving energy.
- ◎ Automatic lubrication reduces power consumption and prolong the service life.
- ◎ Feeding system use double screw feeding. Feeding uniform, widely.
- ◎ Extruding screws are made of high quality 38 CrMoAL alloy steel. After nitriding process, screw are of high strength, wear resistance, antifatigue, long service life.
- ◎ Various length-diameter ratio structure will meet different process requirement.
- ◎ The double-screw have the self-cleaning ability. Restart or replace material without removing the barrel and screws to clean.
- ◎ It is equipped with double-shaft conditioner, which can improve the material and in-crease production and save energy.
- ◎ Barrel use the infrared heating circle of stainless steel. The temperature of each heating zone can be adjusted independently.

### 技术参数 Technical Parameter

型号 Model	总功率 Installed power	实耗功率 Power consumption	主电机功率 Main motor power	产量 Capacity	外形尺寸 Dimension
ZH85-II	97kw	58kw	75kw	300~500kg/h	3580×1040×2050mm
ZH95-I	151kw	90kw	110kw	800~1200kg/h	6200×5000×6000mm



**ZH85-II** 双螺杆挤压膨化机  
Double-screw Extruder



**ZH65-III** 双螺杆挤压膨化机  
Double-screw Extruder



**ZH70-II** 双螺杆挤压膨化机  
Double-screw Extruder



**ZH65-X** 双螺杆挤压膨化机  
Double-screw Extruder

技术参数 Technical Parameter

型号 Model	总功率 Installed power	实耗功率 Power consumption	主电机功率 Main motor power	产量 Capacity	外形尺寸 Dimension	适用产品 Products
ZH85-II	101kw	80kw	75kw	300-500kg/h	4100×1000×2000mm	宠物/蛋白/膨化Pet food/Protein/Puffed
ZH70-II	50kw	40kw/32kw	37kw	200-260kg/h	3300×800×1800mm	油炸/非油炸食品Fried/non-fried food
ZH65-III	31kw	25kw	22kw	120-150kg/h	3000×800×1800mm	油炸/非油炸食品Fried/non-fried food
ZH65-X	31kw	25kw	22kw	120-150kg/h	3000×800×1800mm	宠物食品/膨化食品Pet food/Puffed food





**ZH-160** 通心粉挤压机组  
Macaroni Extruder System



**ZH-100** 通心粉挤压机组  
Single-screw Extruder System



**ZH2000-100** 单螺杆挤压膨化机  
Single-screw Extruder



**ZH2000-85** 单螺杆挤压膨化机  
Single-screw Extruder

### 单螺杆主机特点 Features of Single-screw Extruder

- ◎ 喂料、旋切、主驱动均采用变频调速系统、动力强劲、运行平稳、节省能源。
- ◎ 挤压系统配备六组温控及自动冷却装置，控温准确可靠。
- ◎ 悬挂式模具(刀)组座，可提高模具、刀具的更换速度。
- ◎ 双螺旋强制喂料及光电眼跟踪，喂料均匀，防止缺料。
- ◎ 可配置原料调质系统，使产品品质更佳。
- ◎ Feeding, main driving device, and rotary cutting device adopt inverter to adjust the speed with more powerful drive, stable running, and low consumption.
- ◎ The barrel is allocated with six temperature control and automatic cooling devices for accuracy.
- ◎ Hanging mould and knife seat can increase the speed of replacing mould and knife.
- ◎ Double-screw forcible feeding and photoelectric sensor tracking can feed equally.
- ◎ Pre-conditioner can make better products with high quality.

### 技术参数 Technical Parameter

型号 Model	总功率 Installed power	实耗功率 Power consumption	主电机功率 Main motor power	产量 Capacity	外形尺寸 Dimension	适用产品 Products
ZH-160	132.2kw	96.2kw	90kw	600kg/h	4800×4300×4600mm	通心粉Macaroni
ZH-100-II	45kw	25kw	20kw	200~300kg/h	2000×1600×2100mm	通心粉/二次膨化Macaroni/2D Pellet
ZH2000-100	45kw	36kw	30kw	80~120kg/h	3000×950×2100mm	二次膨化/挤压面食2D Pellet/Flour food
ZH2000-85	40kw	30kw	25kw	60~100kg/h	2800×950×2000mm	二次膨化/挤压面食2D Pellet/Flour food



**ZHKX-VI-D** 通心粉烘干机  
Macaroni Dryer



**ZHKX-V-Y** 五层燃油烤箱  
5-Layer Fuel Oil Dryer

### 多层燃油(气)烘箱特点 Features of Diesel / Gas Dryer

- ◎ 采用高效燃油(气)燃烧器供热, 升温快、能耗低、效率高。
- ◎ 安装热风循环装置, 使烘箱内热量更加均衡。
- ◎ 网带传输速度可调, 并配有准确可靠的温控装置。
- ◎ 双节距滚子链及链轮传动, 无死点, 运行平稳。
- ◎ 烘箱底部为活动式抽屉, 便于残余物料清理, 防止起火。
- ◎ 适宜烘干非油炸膨化食品、营养粉、面包糠、宠物食品、组织蛋白等。
- ◎ High efficient diesel/gas burner can heat swiftly with low consumption and high heat efficiency.
- ◎ Hot wind cycle device makes heat energy equal in the dryer.
- ◎ Adjustable transit speed of conveyor belt with accurate temperature control device.
- ◎ Double-roller chain and chain drive make stable and smooth running.
- ◎ Sliding board bottom of dryer for easy cleaning.
- ◎ Suitable to dry non-fried extrusion snacks, nutritional powder, bread crumb, pet food, textured protein, etc.

### 技术参数 Technical Parameter

型号 Model	总功率 Installed power	燃料/气耗 Diesel/gas consumption	加热温度 Heat temperature	产量 Capacity	外形尺寸 Dimension
ZHKX-VI-D	88kw	----	60~160℃	100~150kg/h	8000×2500×3600mm
ZHKX-III-D	28kw	----	60~160℃	180~300kg/h	6000×1800×2000mm
ZHKX-V-D	49kw	----	60~160℃	300~500kg/h	6000×1800×2500mm
ZHKX-III-Y	----	7-14L/h(6~20.5m <sup>3</sup> /h)	60~160℃	180~300kg/h	6400×2000×2200mm
ZHKX-V-Y	----	8-14L/h(6~20.5m <sup>3</sup> /h)	60~160℃	300~500kg/h	8400×2000×2900mm



**ZHKX-V-D** 五层电烤箱  
5-Layer Electricity Dryer





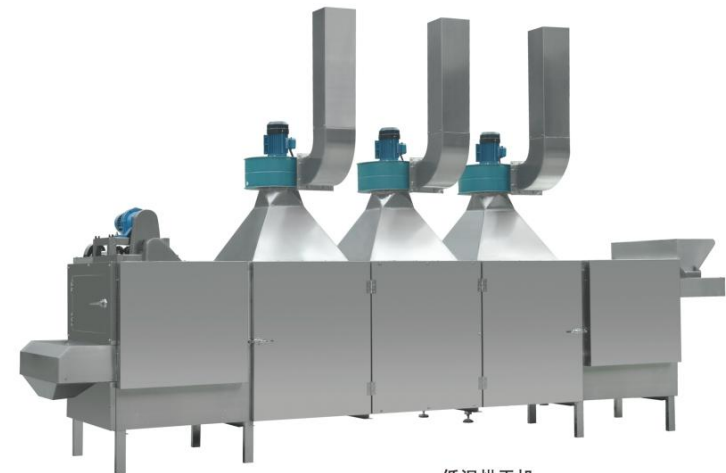
**ZHKX-V-9000-D** 五层电烤箱  
5-Layer Electricity Dryer



**ZHKX-III-H** 高温烘干机  
High Temperature Dryer



**ZHKX-V-9000-Q** 五层蒸汽烤箱  
5-Layer Steam Dryer



**ZHKX-III-L** 低温烘干机  
Low Temperature Dryer



**ZHKX-V-7000-D** 五层伸出式烤箱  
5-Layer Extended Dryer

技术参数 Technical Parameter

型号 Model	总功率 Installed power	能耗/气耗 Diesel/gas consumption	加热温度 Heat temperature	产量 Capacity	外形尺寸 Dimension
ZHKX-V-9000-D	88kw	---	60~160°C	400~600kg/h	9600×2000×2800mm
ZHKX-V-9000-Q	88kw	8-14L/h(6~20.5m³/h)	60~160°C	400~600kg/h	9600×2000×2800mm
ZHKX-V-7000-D	88kw	---	60~160°C	400~600kg/h	9600×2000×2800mm
ZHKX-III-H	88kw	---	60~160°C	150~200kg/h	5000×1800×2000mm
ZHKX-III-L	88kw	---	60~100°C	150~200kg/h	5000×1800×2000mm



**ZYG-D** 自动油炸机  
Automatic Fryer



**LXYG-D** 自动连续油炸线  
Continuous Frying Line



**GTW-D-II** 单滚筒调味线  
Flavoring Line



**GTG** 滚筒干燥机  
Roller Dryer



**PTG** 喷涂线  
Coating Line



**GTW-D-I** 单滚筒调味线  
Flavoring Line

### 连续油炸机特点 Features of Fryer

- ◎ 高效热油锅炉循环加热方式，油升温迅速、波动小。
- ◎ 在炸制过程中，引用动态滤油系统，随时清除废渣，保持炸油新鲜，解决油渣残留致炸油劣化的问题。
- ◎ 优化的锅体结构，注油量减少，炸油周转率高。
- ◎ 锅体输送可分离，方便清理；振动进料，下料均匀。
- ◎ 可采用燃油、燃气、燃煤等多种能源。
- ◎ Hot oil boiler circular heating makes temperature up fast and small fluctuation of oil temperature.
- ◎ Dynamic oil filter system cleans the waste residue and keeps oil fresh during frying.
- ◎ Optimized boiler can reduce the needed oil quantity and make high oil velocity.
- ◎ The boiler body and conveying part can be separated for easy cleaning; vibrating feeding material, discharging equally.
- ◎ It can adopt diesel, gas, coal, etc. as energy source.

### 技术参数 Technical Parameter

型号 Model	总功率 Installed power	燃料/气耗 Diesel/gas consumption	加热温度 Heat temperature	产量 Capacity	外形尺寸 Dimension
ZYG-D	65kw	----	0-250℃	150-250kg/h	4750×2150×2900mm
ZYG-Y	5kw	10L/h	0-250℃	150-250kg/h	4800×2300×2900mm
LXYG-Y	18.66kw	----	0-250℃	400-600kg/h	5300×1200×2400mm

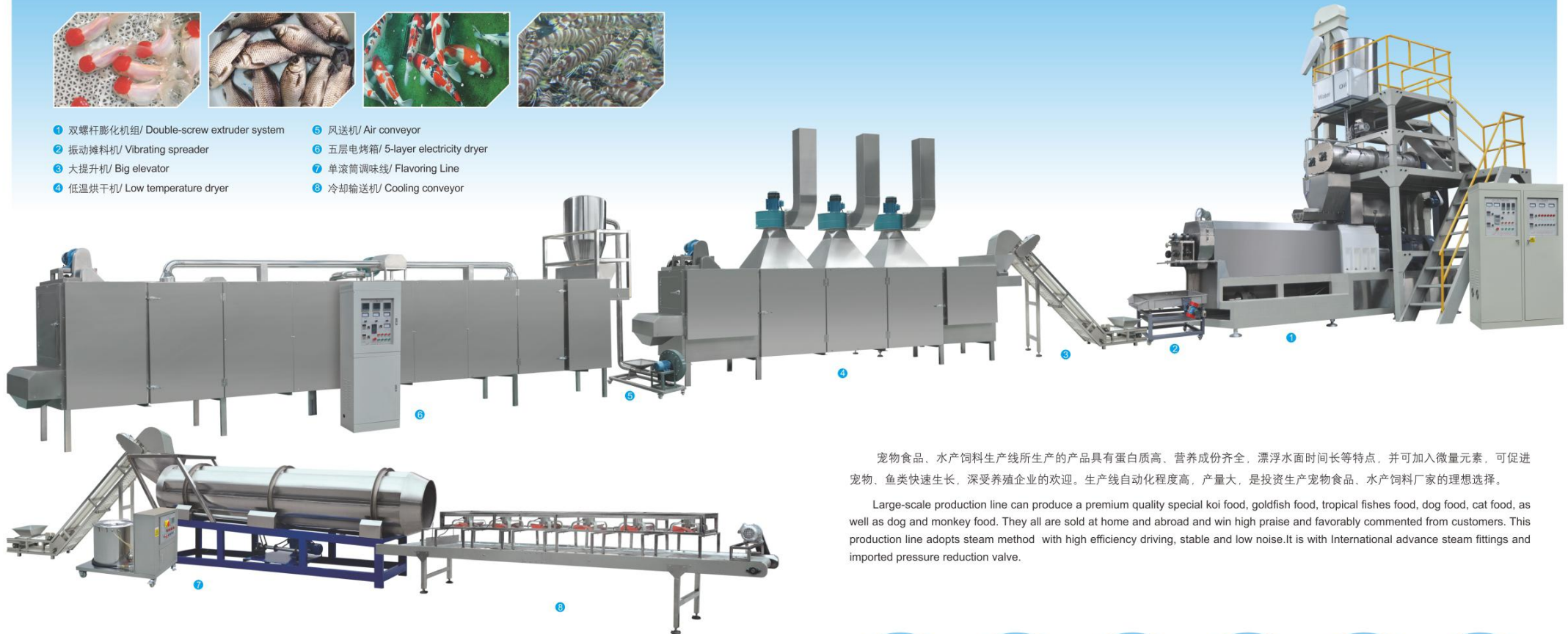
### 技术参数 Technical Parameter

型号 Model	总功率 Installed power	产量 Capacity	外形尺寸 Dimension	型号 Model	总功率 Installed power	产量 Capacity	外形尺寸 Dimension
GTW-D-II	5.5kw	200-400kg/h	5800×760×2100mm	PTG	18kw	150-250kg/h	3000×2000×1850mm
GTW-D-I	3.0kw	150-200kg/h	6800×960×2200mm	GTG	3.0kw	150-200kg/h	3800×800×1850mm





- ① 双螺杆膨化机组/ Double-screw extruder system
- ② 振动摊料机/ Vibrating spreader
- ③ 大提升机/ Big elevator
- ④ 低温烘干机/ Low temperature dryer
- ⑤ 风送机/ Air conveyor
- ⑥ 五层电烤箱/ 5-layer electricity dryer
- ⑦ 单滚筒调味线/ Flavoring Line
- ⑧ 冷却输送机/ Cooling conveyor



宠物食品、水产饲料生产线所生产的产品具有蛋白质高、营养成分齐全、漂浮水面时间长等特点，并可加入微量元素，可促进宠物、鱼类快速生长，深受养殖企业的欢迎。生产线自动化程度高，产量大，是投资生产宠物食品、水产饲料厂家的理想选择。

Large-scale production line can produce a premium quality special koi food, goldfish food, tropical fishes food, dog food, cat food, as well as dog and monkey food. They all are sold at home and abroad and win high praise and favorably commented from customers. This production line adopts steam method with high efficiency driving, stable and low noise. It is with International advance steam fittings and imported pressure reduction valve.

### 生产线工艺流程 Process flow of production



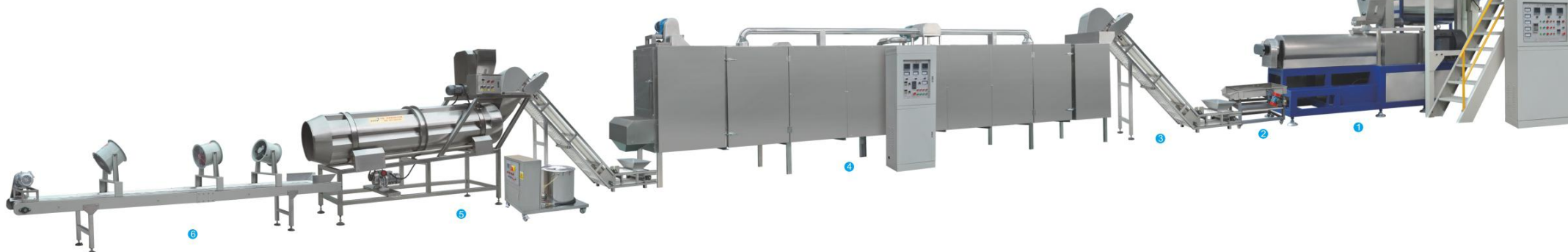
### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH95水产饲料生产线 Aquatic feed processing line	185kw	125kw	800-1200kg/h	42000×3500×4500mm
ZH130水产饲料生产线 Aquatic feed processing line	285kw	145kw	1500-2000kg/h	45000×4500×5500mm





- ① 双螺杆膨化机组/ Double-screw extruder system
- ② 振动摊料机/ Vibrating spreader
- ③ 大提升机/ Big elevator
- ④ 三层电烤箱/ 5-layer electricity dryer
- ⑤ 单滚筒调味线/ Flavoring Line
- ⑥ 冷却输送机/ Cooling conveyor



宠物食品生产线赋予宠物食品以新颖的形式、独特的口味和色彩，并且以最科学的营养配比和易于消化等特点来适应现代宠物食品市场的需求。挤压类“狗咬胶”是经多种物料科学配比，经挤出机挤压成型制成棒状、骨状等不同形状的咬胶型宠物食品。它既可提供犬类动物必需的营养，如蛋白质、脂肪、维生素等，又可供爱犬磨牙，满足不同年龄犬类爱咀嚼的嗜好，同时还可强壮牙龈和颞骨、清洁口腔、清除牙垢、减少疾病传染。

Pet food process line endues pet food with the amount of nutrition, digestible structure, novel shape, and unique taste to meet with the needs of modern market. The dog chewing food is extruded into a variety of shapes such as stick, bone, etc. This kind of food not only can provide nutrition to dogs, like protein, fat, vitamin, etc, but also satisfy the dog nature hobby, benefit to its strong teeth, cleanness of mouth and teeth, and prevents disease.



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH65宠物食品生产线Pet food process line	70kw	45kw	100~150kg/h	28500×3000×3500mm
ZH85宠物食品生产线Pet food process line	140kw	110kw	400~500kg/h	32000×3000×3500mm

### 生产线工艺流程 Process flow of production





# 大型通心粉、意大利面生产线

## Large-scale Macaroni And Pasta Processing Line



- ① 通心粉挤压机组/ Macaroni extruder system
- ② 牵引切断机/ Pulling cutter
- ③ 大提升机/ Big elevator
- ④ 通心粉烘干机/ Macaroni dryer
- ⑤ 冷却输送机/ Cooling conveyor



该生产线以薯类淀粉、玉米淀粉为主要原料，生产市场上流行的豌豆脆、贝壳、螺旋、方管、圆管、波浪等形状各异的二次膨化食品。该生产线工艺独特，配置合理，自动化程度高，性能稳定，无需配置锅炉，集蒸炼挤压成型为一体，生产出的产品造型逼真，油炸后组织细腻，口感酥脆。

This process line uses potato starch, corn starch as main materials to produce a variety of twice extrusion food in different shapes which are popular in the market, such as crispy pea, shell, screw, square tube, round tube, wave, etc. This process line is characterized by unique technics, rational configuration, high automation and stable performance. It can finish steaming, extruding and shaping in one step without a boiler. The products have similar shapes to the real one and taste crispy and delicious after fried.

### 生产线工艺流程 Process flow of production



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH-100通心粉生产线Macaroni process line	65kw	40kw	100~150kg/h	16000×3000×2800mm
ZH-160通心粉生产线Macaroni process line	145kw	115kw	400~500kg/h	28000×4200×4600mm



- ① 拌粉机/ Flour mixer
- ② 螺旋提料机/ Screw conveyor
- ③ 双螺杆主机/ Double-screw extruder
- ④ 夹馅机/ Core filler
- ⑤ 多功能整形机/ Multi-functional shaper
- ⑥ 大提升机/ Big elevator
- ⑦ 三层电烘箱/ 3-layer electricity dryer
- ⑧ 调味线/ Flavoring line
- ⑨ 冷却输送机/ Cooling conveyor

该生产线采用先进的共挤压技术将两种不同质地和口味的产品在双螺杆主机上同时挤出，生产市场流行的麦香鸡块、夹心米酥、米果等各种膨化夹心食品；也可变换模具及辅助设备，生产营养粉、谷物片粥及各种形状的膨化休闲食品。该自动生产线以“适用原料广泛、操作维修方便、能耗低、产量高”等特点在国内处于领先水平。

This process line adopts advanced share extrusion technology, which can extrude products with different textures and tastes out of double-screw extruder at the same time. It can produce a variety of core-filling food which are popular in the market, such as fragrant chicken, core-filling rolls, etc. It can also produce nutritional powder, grain gruel and many other snacks by changing moulds and assistant equipments. This automatic process line is of leading level for its superior characters "Normal materials, convenient operation and maintenance, lower power consumption, higher output".



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH65休闲食品生产线Core-filling snack process line	65kw	45kw	100~150kg/h	18000×1200×2000mm
ZH70休闲食品生产线Core-filling snack process line	85kw	56kw	250~300kg/h	23000×2000×3000mm

### 生产线工艺流程 Process flow of production







- ① 拌粉机/ Flour mixer
- ② 螺旋提料机/ Screw conveyor
- ③ 双螺杆主机/ Double-screw extruder
- ④ 振动摊料机/ Vibrating spreader
- ⑤ 风送机/ Air conveyor
- ⑥ 滚筒干燥机/ Roller dryer
- ⑦ 风送机/ Air conveyor
- ⑧ 大压片机/ Big planishing machine
- ⑨ 风送机/ Air conveyor
- ⑩ 三层燃油烘箱/ 3-layer diesel dryer
- ⑪ 提升机/ Elevator
- ⑫ 振动摊料机/ Vibrating spreader
- ⑬ 高温烘干机/ High temperature dryer
- ⑭ 大提升机/ Big elevator
- ⑮ 喷涂线/ Coating line
- ⑯ 三层伸出烘箱/ 3-layer extended dryer
- ⑰ 冷却输送机/ Cooling conveyor



早餐谷物食品是一种脆性食品，是以谷物为基本原料，经该生产线加工而成颗粒形、薄片形或动物造型的营养方便食品。其突出特点是含有丰富的复合碳水化合物及膳食纤维，同时该挤压膨化加工技术既可强化多种微量元素，如维生素和矿物质，又可添加可可粉、糖粉、蜂蜜、麦芽糖等。兑入咖啡、牛奶、酸奶或功能饮料后，可直接食用。儿童还可将早餐谷物食品当成酥脆休闲小吃食用。

Breakfast cereal food is one crispy food which is processed by this line using grist as basic material. It is fast and nourishing food with given structure in granule shape, flake shape and animal shape. Its outstanding characteristic is containing abundant compound carbohydrate and meal fibre. Breakfast cereal can not only strengthen lots of microelement such as vitamin and mineral, but also be added with cocoa powder, sugar powder, honey, and maltose. You can enjoy it directly by mixing with coffee, milk, yoghurt or functional drink. Children can eat breakfast cereal as sweet crispy snack.

### 生产线工艺流程 Process flow of production



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH65玉米片生产线 Breakfast cereal process line	135kw	100kw	150-250kg/h	48000*3500*2600mm
ZH85玉米片生产线 Breakfast cereal process line	200kw	150kw	350-500kg/h	56000*3500*3000mm



- 1 拌粉机/ Flour mixer
- 2 螺旋提料机/ Screw conveyor
- 3 双螺杆主机/ Double-screw extruder
- 4 振动摊料机/ Vibrating spreader
- 5 大提升机/ Big elevator
- 6 五层电烘箱/ 5-layer electricity dryer
- 7 冷却输送机/ Cooling conveyor

组织蛋白、拉丝蛋白生产线以低温豆粕、花生粕、谷朊粉等为主要原料，既可生产具有一定强度和韧性的组织蛋白、人造肉等食品。又可生产具有高强度和高韧性的肌纤维状拉丝蛋白食品。产品形状有圆柱、放块、薄片、细条、颗粒等，可广泛用于罐头、调味、火腿、肉制品中或烹饪行业。

TVP / TSP / FVP (Textured vegetarian soya protein / Fiber protein) processing line is designed and produced with our rich experiences on food extruder industry for over twenty years. It adopts nonfat low temperature soya bean meal as main raw material to produce all kinds of textured protein food, which is nutritional and easily absorbed by human body. Such soya protein food looks like real muscle meat and mastication. Textured soya protein food is widely applied to many industries, such as can food, seasoning food, ham, cooking, etc. which can be replacement of real meat.



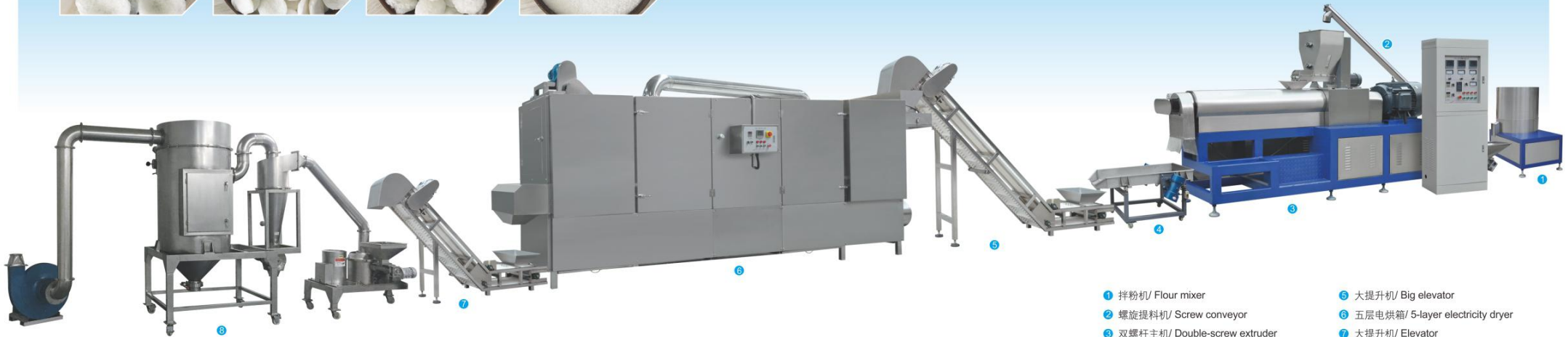
### 生产线工艺流程 Process flow of production



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH65组织蛋白生产线Textured protein process line	95kw	70kw	250~300kg/h	22000×3000×2800mm
ZH70组织蛋白生产线Textured protein process line	115kw	85kw	300~400kg/h	23000×3000×3000mm
ZH85组织蛋白生产线Textured protein process line	135kw	110kw	400~500kg/h	24000×3000×3100mm





- ① 拌粉机/ Flour mixer
- ② 螺旋提料机/ Screw conveyor
- ③ 双螺杆主机/ Double-screw extruder
- ④ 振动摊料机/ Vibrating spreader
- ⑤ 大提升机/ Big elevator
- ⑥ 五层电烘箱/ 5-layer electricity dryer
- ⑦ 大提升机/ Elevator
- ⑧ 超微粉碎机/ Super-fine grinder

该生产线是双螺杆挤压膨化技术又一新的扩展应用。传统的手工炒制法效率低，卫生、质量难以掌控，可加工原料单一。双螺杆挤压膨化技术弥补了以上不足，加工原料广泛，大米粉、玉米粉、豆粉、荞麦、燕麦等均可加工；同时可强化各种营养素，生产多种功能的营养保健食品，如：“瘦身谷物粉”、“红枣莲子羹”、“荞麦粉”、“黑芝麻糊”等。

该生产线经过调节双螺杆挤压主机筒和螺杆结构，经济压膨化、干燥、粉碎，可以同时生产多元化的变性淀粉系列产品，适用于纺织制品制造，食品加工，造纸，建材，铸造，石油钻井等领域。

This process line is one of the newly developed double-screw extruding techniques of our company. The traditional stir-fry handiwork has low efficient and less usable raw materials, and its sanitation and quality are difficult to control. The double-screw extruding technique makes up those lacknesses. It not only can process grain materials, like buckwheat, oats, etc. but strengthen the nutrients to produce multi-functional nutritional healthy food, such as slimming grain powder, buckwheat powder, black sesame paste, red chinese date thick soup, etc.

This production line can make modified Starch, denatured starch, pre gel starch by changing different designed barrel and screws of double screw extruder. Through extruding, inflating, drying, crushing. It is widely used in textile, foodprocess, oil drilling, paper, etc.



### 生产线工艺流程 Process flow of production



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH65营养粉生产线 Nutritional powder process line	82kw	53kw	100-160kg/h	16500*1150*2350mm
ZH70营养粉生产线 Nutritional powder process line	85kw	55kw	200-300kg/h	17500*1150*2350mm



- ① 拌粉机/ Flour mixer
- ⑥ 粉糠机/ Grinder
- ② 螺旋提料机/ Screw conveyor
- ⑦ 螺旋提料机/ Screw conveyor
- ③ 双螺杆主机/ Double-screw extruder
- ⑧ 筛糠机/ Sizer
- ④ 面包糠切断机/ Cutting machine
- ⑨ 大提升机/ Big elevator
- ⑤ 大提升机/ Big elevator
- ⑩ 三层电烘箱/ 3-layer electricity dryer

“面包糠”是广泛使用的食品添加辅料，主要用于西餐炸牛排、炸鸡腿等油炸辅料。我公司研制开发的“面包糠”专用生产线生产改变了传统面包糠的生产工艺，从原料投入到打碎成型均为流水线生产，人员少、余料可重复使用、无废料、降低了制造成本，提高了劳动生产率。该生产线系国内首创，独家生产。

Crumb is mainly used for fried beefsteak and chicken as frying dressing. This line is specially designed and developed to operate from the material to final shaping automatically with less manpower, without waste, lower production cost, and higher production efficiency. This process line is firstly designed and manufactured by our company.



### 生产线工艺流程 Process flow of production



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH65面包糠生产线 Bread crumb process line	65kw	48kw	150~200kg/h	28000×2000×2200mm
ZH70面包糠生产线 Bread crumb process line	96kw	65kw	250~300kg/h	32000×2000×2400mm



# 2D坯料二次膨化食品生产线

## 2D Snack Pellet Puffed Food Processing Line



牵引切断机/ Pulling cutter

- ① 拌粉机/ Flour mixer
- ② 螺旋提料机/ Screw conveyor
- ③ 单螺杆主机/ Single extruder
- ④ 牵引切断机/ Pulling cutter
- ⑤ 提升机/ Elevator
- ⑥ 往复式烘干机/ Recycling dryer
- ⑦ 自动油炸机/ Automatic fryer
- ⑧ 单滚筒调味线/ Flavoring Line

该生产线以薯类淀粉、玉米淀粉为主要原料，生产市场上流行的豌豆脆、贝壳、螺旋、方管、圆管、波浪等形状各异的二次膨化食品。该生产线工艺独特，配置合理，自动化程度高，性能稳定，无需配置锅炉，集蒸炼挤压成型为一体，生产出的产品造型逼真，油炸后组织细腻，口感酥脆。

This process line uses potato starch, corn starch as main materials to produce a variety of twice extrusion food in different shapes which are popular in the market, such as crispy pea, shell, screw, square tube, round tube, wave, etc. This process line is characterized by unique technics, rational configuration, high automation and stable performance. It can finish steaming, extruding and shaping in one step without a boiler. The products have similar shapes to the real one and taste crispy and delicious after fried.



### 生产线工艺流程 Process flow of production



### 技术参数 Technical Parameter

型号 Model	总装机容量 Installed power	实耗功率 Power consumption	生产能力 Capacity	外形尺寸 Dimension
ZH2000-85二次膨化生产线2D Pellet process line	54kw	38kw	60~85kg/h	32000×2400×2900mm
ZH2000-85二次膨化生产线2D Pellet process line	82kw	57kw	110~140kg/h	32500×2400×2900mm



### ZHK-520 全自动颗粒包装生产线

Full-automatic Granule Packing Line

#### 生产线特点 Features of Packing Line

- ◎ 进口PLC全电脑控制系统，人机界面，触摸屏操作简便、直观，性能卓越。
- ◎ 伺服运膜系统，定位准确，包装美观。
- ◎ 完善的自动报警保护功能，将损耗减到最低。
- ◎ 本机与计量装置配套即可自动完成计量、送料、充填制袋、日期打印的全部包装过程。
- ◎ PLC control with touch panel-step by step instruction.
- ◎ Equipped with servo winding system, pneumatic control system.
- ◎ The maximize to improve the whole machine's precision, reliability and stability.
- ◎ Use intellectual temperature controller, the high temperature control to ensure the neat sealing.
- ◎ The perfect automatic alarm safety protection, little waste. This machine completes the whole packing procedure of measuring, feeding, bagging, date printing, charging (exhausting), products out-putting. Counting automatically.

### ZH-50 电子定量包装秤

Electronic Quantitative Packing Scales

#### 生产线特点 Features of Packing Line

- ◎ 该系列电子秤是一种采用当今最新技术的净重型电子秤，它适合于瓜子、花生、莲子、核桃等不规则物料进行称重计量包装。
- ◎ 该系列电子秤給料系统采用双振动门式放料，大、小加料及瞬间停止落料等多种处理形式。
- ◎ 有效的保证了包装的精度、速度。
- ◎ The electronic scale is a kind of using today's latest technology net heavy electronic scale, it is suitable for melon seeds, peanuts, lotus seed, walnut and irregular materials weighing metering packaging.
- ◎ This series of electronic scale feeding system adopts double door type vibration feeding, large and small feeding instantaneous stop blanking processing a variety of ways.
- ◎ Effectively guarantee the packing speed and accuracy.

#### 技术参数Technical Parameter

型号/Model	ZHF-398	ZHK-520	ZH-720	ZH-50
电源规格Power specification	3.0Kw/220V, 50Hz	3.5Kw/220V, 50Hz	4.5Kw/220V, 50Hz	1.5Kw/380V, 50Hz
包装速度Packing speed	<45bag/min	<45bag/min	<45bag/min	240bag/h
包装袋尺寸Pouch size	W:50-200mm L:100-300mm	W:100-250mm L:100-350mm	W:100-350mm L:100-450mm	Air source: 0.4-0.8Mpa
包装重量Packing weight	10-1000g	10-1000g	10-1000g	25-50kg
外型尺寸Dimension	1400×980×1700mm	1430×1200×1700mm	1780×1350×2000mm	750×1360×2400mm



### WFJ 系列超微粉碎机

Series Super Efficient Pulverizer

#### 技术参数Technical Parameter

型号 Model	生产能力(kg/h) Production capacity	总功率(kw) Total Power	主轴转速(r/min) Main speed	外形尺寸(mm) Overall size	重量(kg) Weight
15型	50-200	16.75	5800	4200×1250×2700	850
20型	80-300	22.15	4200	4700×1250×2900	850
30型	100-800	46	3800	6640×1300×3960	960
60型	200-1000	84.15	3200	7500×2300×4530	3200

### B型 万能吸尘式粉碎机/单机

Universal Aspiration Crusher/Stand-alone

#### 技术参数Technical Parameter

型号/Model	20B型	30B型	40B型	50B型
生产能力(kg/h)Production Capacity	60-150	100-300	200-500	300-800
粉碎细度(mesh)Crushing fineness	20-120mesh			
粉碎电机(kw)Crushing Motor	4	5.5	7.5	18.5
吸尘电机(kw)Vacuum Motor	0.55	0.75	1.5	2.2
吸尘尺寸(mm)Aspiration dimension	1650×110×1650	1800×600×1650	2050×1600×1700	2150×1750×2700



### S49 系列三维旋转振动筛

Series Three-D Rotary Vibrating Sieve

#### 技术参数Technical Parameter

型号 Model	有效筛分面积(m²) Effective sieving area	筛网规格(mesh) Sieving mesh specification	层(s) Layer	功率Power(kw)	
				震动功率Vibration motor	常规功率Common motor
S49-600	0.2289	2-500	1-4	0.25	0.75
S49-800	0.4183	2-500	1-4	0.55	1.1
S49-1200	0.9499	2-500	1-4	1.1	1.5
S49-1500	1.5386	2-500	1-4	1.5	2.2
S49-1800	2.2687	2-500	1-3	4.0	3.0

### GFP 系列颗粒方形筛

Series Granule Pill Screen

#### 技术参数Technical Parameter

型号 Model	尺寸(mm) Size	物料粒度(mm) Material granularity	振幅 Amplitude	层(s) Layers	功率(kw) Power
GFP-616	670×1190	0.25-15	1-8	1-3	2×0.25
GFP-620	670×1840				2×0.4
GFP-820	800×1835				2×0.75

