

# CE ISO 100-400kg/h Dough Forming Single Screw Extruder Machine Green Food Equipment

Single Screw Extruder Food Processing Machine was designed from single screw extruder suppliers for the food extruder machine at controlled temperatures of pre-gelatinized raw material and/or cooked doughs coming from a single screw extruder food processing machine, using interchangeable dies and a suitable cutting system. a wide range of pellet snacks products for sales, such as pellet snacks, 2D pellet, 3D pellet, and special dietary pasta, is obtained by varying single screw extruder food processing conditions, raw materials recipe and replacing dies.



**PRODUCT PARAMETERS OF SINGLE SCREW EXTRUDER MACHINE**

Applicable Industries:	Food Manufacturing Plant, Farms, Home Use, Retail, Food & Beverage Shops
Type:	single screw extruder food processing
Weight:	6000 kg
Certificate:	CE,SGS,ISO
Application:	pellet snacks,2D pellet, 3D pellet, and special dietary pasta
Capacity:	150kg/h 250kg/h 500kg/h,
Dimension(L*W*H):	18x2x4m

### THE WORKING PRINCIPLE OF A SINGLE SCREW EXTRUDER

All raw materials requiring cooking are processed in the extrusion-cooking step, followed by the shaping step of the extruder machine process, which can be either any other system capable of giving a correct shape to the hot dough before the drying. For example , Extruders are used to shape the pellets after cooking, to make die cut products or to extrude sheets or ribbons to be shaped and cut at distance from the die. single screw extruder food processing complete with cutting group.





## DETAIL OF AUTOMATIC SINGLE SCREW EXTRUDER MACHINE LINE



## THE DESCRIPTION OF A SINGLE SCREW EXTRUDER

Single Screw Extruder Food Processing Machine can process automatically and continuously a great variety of flours and cereal/potato starches, both mixed and in pure state. single screw extruder machine manufacturer also can choose equipped with dosers for solid and liquid ingredients, high speed pre-mixer, mixing tank, extrusion group composed of motor with variable speed, gear box and thrust bearing group. Forced feeding screw, modular type cooking screw with interchangeable



shear locks, segmented barrel with independent thermo regulation.



**THE DETAILS OF SINGLE SCREW EXTRUDER**

Performance:	The main motor, feeding motor, and rotary cutting motor are all stepless frequency conversion speed control, simple operation
Electrical components:	Domestic
Motor:	Lijiu brand
Frame:	Sprayed carbon steel frame (beautiful, rust-proof, more durable
Outer skin:	Feeder, barrel cover, rotary cutting cover, and mixing shaft are all made of 304 stainless steel
Gear box:	The box bearing is made in harbin, and the gear is made of high-strength alloy nitrided steel.

Gearbox cooling:	Forced cooling system, filter system
Screw:	The diameter of the screw is 100mm. It is made of 38crmoarl alloy steel
Barrel:	The barrel is made of special wear-resistant steel for round barrels, the outer layer is 45# steel, the barrel is cooled by water channels, electric heating, and the die body has a water circulation device.
Temperature control:	Independent automatic temperature control in 4 zones
Cooling control:	4 zones independent automatic cooling control



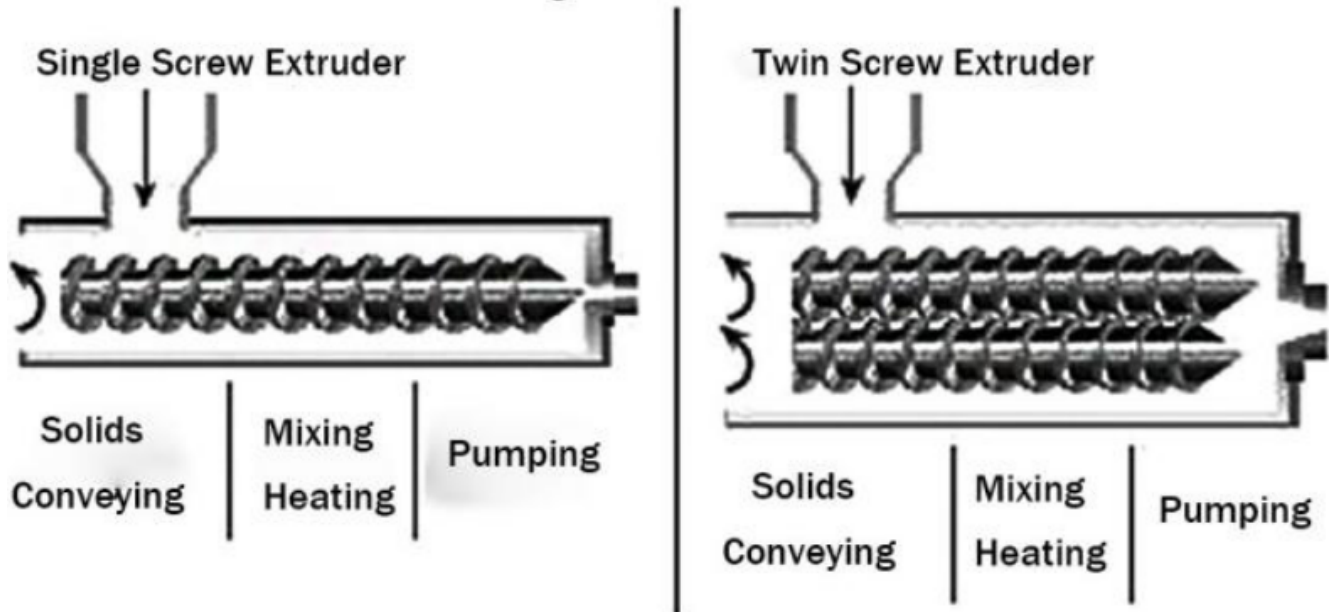
## TECHNICAL PARAMETERS OF SINGLE SCREW EXTRUDER MACHINE

DIFFERENT MODEL OF SINGLE SCREW EXTRUDER				
Model	Installed Power	Power Consumption	Output	Size (L*W*H)
LY 100	55KW	30KW	100kg/h	3200x1500x1650mm

## THE DIFFERENCE BETWEEN TWIN SCREW EXTRUDER AND SINGLE SCREW EXTRUDER

SINGLE SCREW EXTRUDER VS TWIN SCREW EXTRUDER	
1	Capacity: Single screw is suitable for starch extrusion cooking but without puffing. The material stays in the food extruder machine for a long time; the twin-screw has good mixing and cooking ability, the material is short in the extruder, and is suitable for powder processing.
2	processing capacity and energy consumption aspects: twin-screw extruder production, extrusion speed, unit output energy consumption is low, and single screw rod difference.
3	Pellets become ready-to-eat snacks once they have been expanded in frying process or baking process.
4	Snack pellets can be made with a wide variety of grains powder— corn starch, wheat starch, rice starch, tapioca starch— or potatoes starch and other vegetables powder. They can also incorporate aromas and colors in their recipes.
5	Operational aspects: Double screw manipulation easy, process control simple, Single screw operation is relatively complex, process control requirements are high.

Cross-section of single and twin screw Extruder Barrel



### ADVANTAGES OF SINGLE SCREW EXTRUDER STRUCTURE

The main advantages of the pellet snack technology from [food processing machinery](#) manufacturers

By virtue of its superior performance, single screw extruder has been widely used over the years. It can be used for processing a variety of pellet products, such as pasta, 2d & pellet, potato chips, corn chips.

Advantages of pellet extruder machine. Designed by advanced technology, it has good extruding function to ensure stable and high speed extrusion.

Well defined shapes compared to directly expanded products

Wide choice of raw materials: Possibly all starches containing raw materials can be utilized.

Large choice of shaping systems: From the most classical die-cut products to the sheeted ones, the double and the multilayer ones