# Application of soybean protein production line

The soybean extruder machines uses defatted soybean meal and peanut meal as the main raw materials, which are stirred, squeezed and sheared to form a layered fiber structure; its product has a high protein content, has a meaty state and taste, and has the characteristics of oil absorption, water absorption, and taste absorption; Free of cholesterol and animal fat.

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The production line has following features: many models, flexible equipment configuration, wide range of raw materials, a wide variety of final products, and simple operation. By changing the cutters, it can produce different kinds of protein shapes to meet customer requirements. This kind of product is popular with vegetarians.



Full fat soya extruder machine can produce different protein content products by changing formulations. Soya bari manufacturing plant produce a kind of vegetarianism with meat like flavor and texture taste, also known as tissue protein. You can get different structure and different shapes protein products, such as soya nuggets, soya chunks, soya mince, etc.

### Flow Chart Of Soya Bari Manufacturing Plant:

Mixer-Screw Conveyor-Twin Screw Extruder- Air Conveyor- Multi-layor oven- Cooling machine



**Soya Protein Food Processing Line Feature** 

1	Twin screw machine is composed of feeding system, extrusion system, rotary cutting system, heating system, transmission system and control system.	
2	The screws are made by alloy steel (38CrMoAL) ,the life of the screw is longer,	
3	The gearbox has automatic lubrication function, with extends gear life.	

	4	Visual automatic temperature control system to make temperature control more			
ı		intuitive and parameters more clearly			
ſ	5	The double screw has a self-cleaning function, no need to remove the screw out to			
		clean it when the machine is stopped			
6 Different screw and length-diameter ratio can meet different production		Different screw and length-diameter ratio can meet different production processes.			



Full fat soya extruder machine is mainly through a twin-screw extruder, defatted soybeans, concentrated soybean protein or separated soybean protein are added with a certain amount of water and additives to mix uniformly, and the raw materials are pushed in the barrel by the twin screw, and in the screw and barrel It is forced to heat, pressurize, and squeeze out to make it into a protein molecule. Soybean pieces are arranged neatly, produce tissue structure in the same direction, and at the same time coagulate to form fibrin, and the chewing feeling is similar to that of meat.

### **Technical Parameter Of Soybean Extruder Machines:**

Model	Extruder Power	Output	Extruder Dimension
LY65-TVP	45 kw	100~150kg/h	3600x1000x2000mm
LY 65	45kw	120~160kg/h	3200×1000×1800mm
LY 75-TL	140 kw	200~300kg/h	5200x1000x1900mm
LY 75-E	125 kw	400~500kg/h	5900x1000x1900mm
LY 85-V	110 kw	300-400 kg/h	5900x1000x1900mm
LY 100	160 kw	1000kg/h	5700*1300*2500mm

#### **Applications**

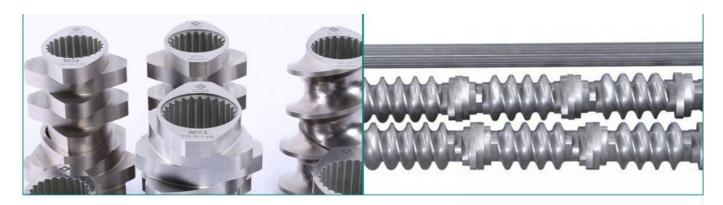
?1?Dry Textured soya protein Pellets, Crumbs, Minced, Flakes, Chunks, Chips, Schnitzel, Nuggets.

?2?High moisture wet protein Soya,pea, Pea-sunflower



## Advantages of soy protein:

- 1. Adding 10-20% silk protein to meat products can replace beef and pork without affecting the quality of the product and reducing the cost of raw materials.
- 2. It can prevent the atrophy of meat quality and has higher nutritional value.
- 3. Textured soy protein contains natural antioxidants. After adding textured soy protein to meat products, it can play a protective role and reduce oxidative deterioration.
- 4. In recent years, as a new type of plant protein, vegetarian soybean meat is replacing pork and beef, and is widely used in meat products, spicy foods, and snacks.





- 1 Screw made by nit-riding process, high strength and wear-resting.
- 2 Self-cleaning ability, no need to discharge or clean the barrel and screw when roasting or replacing of materials.
- 3 Adopting speed adjusted converter on feeding system, extrusion system and cutting system.
- Food grade stainless steel twin screw feeding machine, stable materials feeding in the whole food process.
- 5 Gearbox with automatic lubrication function, extending gear life.
- 6 World famous brand Siemens main motor, guaranteeing good quality.
- 7 Increased radiator on driving part for forced cooling effect, ensuring extruder operates safely.
- Barrel with water-cooled circulation, raw materials not only for corn/rice, also for wheat flour/starch with high viscosity. Different moisture-extrusion temperature ratio, whole-expanded and half expanded as different type of products.
- 9 Different screw and length-diameter ratio can meet different production processes.