

# Nutrition Powder Process Line

Nutrition Powder Process Line is a system or equipment used in the production of nutrition powder. It is designed to mix, extrude, and dry a variety of ingredients such as cereals, vegetables, vitamins, and minerals to produce a powder that is easy to store and use. The process line typically includes a variety of machinery such as mixers, extruders, dryers, and sieving machines, as well as conveying systems for product transfer. The final product can be used as a food supplement or a meal replacement for both humans and animals. The nutrition process line can make modified starch, denatured starch, pre gel starch by changing different designed barrel and screws of twin screw extruder. Modified starch is widely used in textile, food process, oil drilling, paper, construction industries etc.



## The Flowchart Of Nutrition Powder Process Line

1. Screw Conveyor ---
2. Ribbon Mixer ---
3. Screw Conveyor ---
4. Double Screw Extruder With Cooling System ---
5. Air Conveyor ---
6. Drying Oven ---
7. Air Conveyor ---
8. Crushing Machine With Dust Pelletizing System ---
9. Air Conveyor ---
10. Blending Mixer ---
11. Packaging



## The Function Of Nutrition Powder Process Line

**1.Screw Conveyor:** Screw conveyor can not only convey on the level but also by any angel these materials can be conveyed in the stainless steel roller without leaking, dust pollution; meanwhile it can send the self-mixer to the feeding machine or the conditioner and directly send the discharge hole of the inflating extruder.

**2.Ribbon Mixer:** The powder is mixed with other ingredients to create a homogeneous blend. The mixing process is important to ensure that the powder has a consistent nutrient profile, texture, and flavor.

**3.Double Screw Extruder With Cooling System:** The powder is mixed with other ingredients to create a homogeneous blend. The mixing process is important to ensure that the powder has a consistent nutrient profile, texture, and flavor.

**4.Air Conveyor:** Used to carry products to the next device.

**5.Drying Oven:** After extrusion, the product is dried and cooled to remove any moisture and improve its shelf life. Different drying methods can be used, including spray drying, freeze drying, and oven drying.

**6.Crushing Machine With Dust Pelletizing System:** Grinding the extruded granules into required sizes of powder or smaller granules with the help of mesh screen.Two mesh screens are provided for free.

**7.Blending Mixer:** The powder is mixed with other ingredients to create a homogeneous blend. The mixing process is important to ensure that the powder has a consistent nutrient profile, texture, and flavor.

**8.Packaging:** Finally, the dried powder is packaged in a suitable container and labeled for distribution. Packaging is an important step to ensure that the product remains fresh and free from contamination during transportation and storage.



## The Parameter Of Nutrition Powder Process Line

Model	Installed Powder (Kw)	Powder Consumption (Kw)	Output (Kg/h)	Size (L*W*H)
LY65	88kw	62kw	120-150kg/h	19000*1200*2000mm
LY70	142kw	99kw	200-250kg/h	24000*1200*2000mm
LY85	160kw	130kw	300-500kg/h	28000*1500*2000mm
LY90	220kw	154kw	800-1000kg/h	29000*2500*2200mm
LY95	220kw	154kw	1000-1500kg/h	30000*2500*3500mm



## The Advantage Of Nutrition Powder Process Line

<b>Consistency</b>	Nutritional powder lines are designed to produce nutritional powders with consistent texture and nutritional content.
<b>Efficiency</b>	Compared with traditional methods, this production line is able to produce a large amount of nutritional powder in a shorter time.
<b>Customization</b>	The production line can be customized to produce specific types of nutritional powders, allowing manufacturers to meet customer needs.

<b>Nutritional Value</b>	The nutritional powder produced by this production line is rich in essential nutrients such as vitamins and minerals that are beneficial to the human body.
<b>Shelf Life</b>	Compared with traditional food, the powder produced by this production line has a longer shelf life and is easier to store and transport.
<b>Cost-Effectiveness</b>	The use of process lines can reduce labor costs and increase product output, and is a cost-effective manufacturing method.
<b>Safety And Sanitation</b>	The production line is designed with safety and sanitation as the design concept to ensure that the nutritional powder produced is pollution-free and safe to eat.



## Nutrition Powder Product Display

Nutrition powder products usually contain a variety of nutrients, vitamins and minerals that are beneficial to the human body. Some common ingredients in nutritional powders include:

<b>Protein</b>	Protein is an essential nutrient necessary for the growth and repair of human muscles, bones and other tissues.
<b>Carbohydrates</b>	Carbohydrates provide the body with energy and are essential for the proper function of the brain and muscles.
<b>Fiber</b>	Fiber is important for digestion and helps regulate blood sugar levels and cholesterol levels in the body.

<b>Vitamins</b>	Vitamins are important for a variety of bodily functions, including maintaining a healthy immune system, proper cell growth, and energy production.
<b>Minerals</b>	Minerals are essential nutrients needed for healthy bones, teeth, and other bodily functions.
<b>Probiotics</b>	Probiotics are beneficial bacteria that are important for maintaining a healthy gut microbiome and digestive system.
<b>Antioxidants</b>	Antioxidants are compounds that help protect the body from damage caused by free radicals and oxidative stress.

