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 drlling, paper, construction industries etc.



The Flowchart Of Nutrition Powder Process Line

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	Powder Consumption	Output	Size
			(Kg/h)	(L*W*H)
	(Kw)	(Kw)		
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

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

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

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

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

