

# How the most popular pet foods are produced

Introducción detallada :

Product Introduction

Equipment list of Big Capacity DryPet FoodProduction Line

The Detail Descriptions of ThePet FoodMaking Machine

Parameters ofEachMachine inThePetFoodManufacturingLine

Technical Parameter of thePet FoodMaking Machine

Advantages ofPetFoodProcessing Line

About Us

Our Services

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## Product Introduction

Our [pet food making machine](#) is tailored for pets of different ages, breeds and health conditions. Rich in high-quality protein, such as chicken, beef, fish, etc., it provides pet the nutrients they need for muscle growth and repair, helping them to be full of vitality. In terms of food technology, we use advanced low-temperature baking technology to retain the nutrients of the ingredients to the greatest extent and avoid high temperature damage to nutrients. In addition, the particle size and shape are carefully designed to facilitate pet chew and swallow. Whether it is a puppy or a cat, or an elderly pet, it can be easily eaten.



## Equipment list of Big Capacity Dry Pet Food Production Line

Mixer- Screw conveyor- Twin screw extruder- Air conveyor- Oven- Hoister- Flavoring machine- Cooling Conveyor-Packaging machine

### Mixing machine:

used to mix and stir various raw materials such as flour, sugar, oil, water, additives, etc. according to a certain formula ratio, so that the raw materials are fully and evenly mixed to form a dough with a certain viscosity and plasticity, laying the foundation for subsequent biscuit production.

### Screw conveyor:

mainly used to transport the mixed dough or other raw materials from one location to another. The rotation of the spiral blade pushes the material to move in the conveying pipeline. It has the characteristics of stable conveying and good sealing, which can effectively prevent material leakage and pollution.

### Twin-screw extruder:

through the rotation and extrusion of the two screws, the dough is further extruded, matured and formed. According to different molds and process requirements, the dough can be extruded into biscuit blanks of various shapes and specifications. At the same time, the dough can be heated and matured to a certain extent during the extrusion process.

Air conveyor:

Use wind power to transport the biscuit blanks from the extruder to the oven or other subsequent equipment. The airflow generated by the fan makes the biscuit blanks suspended and transported in the pipeline, which has the advantages of fast conveyer speed and not easy to damage the blanks.

Oven:

It is one of the key equipment in biscuit production and is mainly used to bake biscuits. The heating element generates heat to bake the biscuit blanks under certain temperature and time conditions, so that the moisture in the biscuit blanks evaporates, the starch gelatinizes, and the protein denatures, so that the biscuits have a crisp taste and unique flavor, and form a beautiful color.

Hoist:

It is used to lift the biscuits that have been baked or otherwise treated to a certain height so that they can be transported to subsequent equipment for further processing or packaging. Common ones include bucket elevators, which drive the hopper through a chain or belt to lift the biscuits from a low place to a high place.

Flavoring machine:

Various seasonings, such as salt, sugar, chocolate sauce, cream, etc., can be evenly sprayed or applied on the surface of the biscuits to increase the flavor and taste of the biscuits and meet the taste needs of different consumers.

Cooling machine

Cool the baked biscuits. Through forced ventilation or other cooling methods, the biscuits are cooled quickly, the heat is dissipated, the internal structure of the biscuits is stabilized, and the biscuits are prevented from becoming soft, deformed or deteriorating due to excessive temperature during the subsequent packaging process. It is also conducive to improving packaging efficiency and quality.

Packaging machine:

Pack the cooled biscuits according to certain specifications and quantities. It can complete a series of packaging processes such as biscuit metering, nitrogen filling, sealing, labeling, etc., and package the biscuits into various forms of products, such as bags, boxes, cans, etc., to facilitate the storage, transportation and sales of biscuits.



## The Detail Descriptions of ThePet Food Making Machine

| No. | Item             | Detail descriptions of pet food extrusion line                                                                                                   |
|-----|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Raw materials    | Meat meal, fish meal, bone powder, corn powder, soya meal and other grains' powder, etc.                                                         |
| 2   | Consumption      | Low power and labor consumption                                                                                                                  |
| 3   | Capacity         | 120-150kg/h, 200-250kg/h, 400-500kg/h, 1000-1200kg/h                                                                                             |
| 4   | Machine material | Stainless steel                                                                                                                                  |
| 5   | Products         | This line can produce various taste pet food, and the raw materials can be extruded into various shapes by the mold by adjusting the parameters. |



## Parameters of Each Machine in ThePet Food Manufacturing Line

| Machine Name   | Machine parameters                                                                                                                              |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Mixer          | Input Voltage?380V/50HZ<br>Power:5.5kw<br>cubage :1100L<br>Dimension:2200*1250*2350mm<br>Capacity:1500kg/h<br>Material: stainless steel         |
| Screw conveyor | Model?LY-SH<br>Input Voltage?380V/50HZ<br>Installed Capacity?1.1KW<br>Power Consumption?1.1KW<br>Output?300-500Kg/h<br>Dimension:2800×600×2300m |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Twin screw extruder                    | <p>Total power: 93kw<br/> Main motor power: 75kw<br/> Heating power: 15kw<br/> Feeding motor power: 0.75kw<br/> Rotary cutting motor power: 1.5kw<br/> Oil Pump Power?0.75KW<br/> Integral screw<br/> Length: 1635mm<br/> Diameter: 85mm<br/> Dimension: 4200*900*2200mm<br/> Capacity:400-500kg/h</p>                                                                                                                                                                                                                                                                              |
| Air conveyor                           | <p>Model:PC<br/> Power:0.1*2Kw<br/> Size:1540×735×1160mm<br/> Voltage:380V/50Hz<br/> Fan:2 pieces 0.18kw/piece<br/> Feature:<br/> 1. Use vibration to separate the product.<br/> 2. Configure 2 cooling fans</p>                                                                                                                                                                                                                                                                                                                                                                    |
| Multi-layer oven<br>(electric heating) | <p>Model: LD-HGX7-10<br/> Power supply voltage: 380V / 50Hz<br/> With Double layers belt-One layer Mesh belt<br/> One layer mesh cloths<br/> Installation power:285.5KW<br/> Actual power consumption: 199.85KW<br/> Transmission power: 3sets 1.1kw/set<br/> Hot air circulating fans 5sets 1.1kw/set.<br/> Dehumidification fan 3sets 0.55kw/set<br/> Heating power: 280kw<br/> Feeding: 0.55KW<br/> Heat source:Electrical Heating tube<br/> Mesh belt width: 900mm<br/> Number of floors: 7 floors<br/> Drying box size:10000*1200*2200mm<br/> Dimensions:11000*1700*2800mm</p> |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-layer oven<br>(gasheating)   | <p>Power supply voltage: 380V / 50Hz</p> <p>With Double layers belt-One layer Mesh belt</p> <p>One layer mesh cloths</p> <p>Dehumidification fan: 0.55kw/set 3sets</p> <p>Hot air circulation fan 1sets 4kw</p> <p>Transmission power: 1.5kw*2</p> <p>Heat source:Gas LPG heating</p> <p>Burner brand: Italy Baltur</p> <p>BTG-25 Fuel Consumption:12-30kg/h</p> <p>Mesh belt width: 900mm</p> <p>Number of floors: 7 floors</p> <p>Dimensions:10500*1500*2400mm</p>                                                                                                                                                               |
| Multi-layer oven<br>(steamheating) | <p>Power supply voltage: 380V / 50Hz</p> <p>With Double layers belt-One layer Mesh belt</p> <p>One layer mesh cloths</p> <p>Heat source:Steam</p> <p>Total Power:6.05KW</p> <p>Transmission power: 2 sets 1.1kw/set=2.2KW</p> <p><u>Dehumidification fan 2sets 0.55kw/set=1.1KW</u></p> <p><u>Can be automatically turned on at regular intervals</u></p> <p>Steam heat exchanger?4group</p> <p>Hot air circulating fans 2.2kw/set.</p> <p>Feeding: 0.55KW(swing head distributor)</p> <p>Mesh belt width: 800mm</p> <p>Number of floors: 7layer</p> <p>Heating Box size:10000*1200*2200mm</p> <p>Dimensions:11000*1600*2800mm</p> |
| Hoister                            | <p>Usage:Deliver the snack to next device.</p> <p>Working together with the flavoring drum.</p> <p>Food grade PVC,Stainless steel.</p> <p>HoisterPower:0.37kw</p> <p>Conveyor Dimension: 1800*700*780 mm</p>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Flavoring machine                  | <p>Model :DC-II</p> <p>Power:0.75kw</p> <p>Motor:0.37kw</p> <p>Length:2100mm</p> <p>Dimension: 2300*780*1450 mm</p> <p>Capacity:100-200KG/H</p> <p>Function: Spray seasoning oil and powder onto the snacks s<br/>make the snacks tasteful.</p>                                                                                                                                                                                                                                                                                                                                                                                    |

|                   |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Seasoning machine | powder  | Model :DC-II<br>Power:0.37kw<br>Feeding Hopper volume :10kg<br>Size:0.7×0.4×0.6m<br>Capacity:0.7×0.4×0.4m                                                                                                                                                                                                                                                                                                                                                                                                            |
| Oil sprayer       |         | Heating power:2KW<br>Motor:0.37KW<br>Dimension: 380*320*750MM                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Cooling conveyor  |         | Model: LYC<br>Driving: 0.75kw,<br>Dimension:5000x900x700mm,<br>4 sets blowers 0.22KW/set                                                                                                                                                                                                                                                                                                                                                                                                                             |
| LY-50 machine     | Packing | Model specification? LY-50<br>Standard configuration ?The main body is (304 stainless steel)? Control system, 3m conveyor, sewing machine, bucket elevator (304 stainless steel)<br>Feeding method ?Three-speed gravity feeding<br>Bag clamping method: Jaw bag clamping<br>Weighing range (kg): 20-50<br>Weighing accuracy: ±0.2%<br>Weighing speed (bag/hour): 200-300<br>Power consumption and gas consumption :0.4—0.6Mpa<br>compressed air 1m³/h<br>Scope of application :granular materials with good fluidity |



## Technical Parameter of the Pet Food Making Machine

| Model  | Extruder Power | Output        | Dimension        |
|--------|----------------|---------------|------------------|
| LY 65  | 33.87kw        | 120-150kg/h   | 2500*930*1850mm  |
| LY 70  | 44.87kw        | 200-250kg/h   | 3000*850*1300mm  |
| LY 85D | 93KW           | 400-500kg/h   | 4200*900*2200mm  |
| LY 95P | 124.4KW        | 1000-1200kg/h | 5500×2400×3200mm |

## Advantages of Pet Food Processing Line

### 1. Twin-screw extrusion technology:

(1)The twin-screw structure can fully mix raw materials (such as protein, grains, vitamins, etc.), ensure uniform nutrition distribution, and improve product quality.

(2)Strong adaptability: Supports high-water and high-fat formulas, avoids the clogging problem of traditional single screws, and broadens the range of raw material selection.

(3)Diversified shapes: By changing the mold and adjusting the screw speed and temperature, different shapes (granules, strips, 3D shapes, etc.) can be quickly produced to meet the diverse needs of the market.

(4)High-temperature sterilization: The high temperature and high pressure environment during the extrusion process can kill pathogens, extend the shelf life, and reduce the

subsequent sterilization process.

## 2. Multi-shape production capacity:

(1)Flexible mold switching: Equipped with standardized mold interfaces, different shape molds (such as bones, fish shapes, letters, etc.) can be quickly replaced to shorten production adjustment time.

(2)Parameter adjustability: By controlling the extrusion pressure, temperature and cutting speed, the density and texture of the product can be differentiated (such as crispy and soft), which can be adapted to the needs of different pets

## 3.Multi-mode heating of multi-layer ovens:

(1)Customers can choose different heating methods such as electric heating, fuel gas heating, steam heating, etc. according to local production conditions

(2)Layered temperature control: Each layer of the oven can set the temperature and time independently to avoid over-baking, retain nutrients and optimize the taste (such as crispy outer layer and soft inner layer).

(3)Energy saving and high efficiency: The multi-layer structure maximizes the use of energy, shortens the drying time, and increases production capacity by 30%-50%.

## 4.Smart touch control cabinet:

(1)Convenient human-computer interaction: The graphical interface intuitively displays production parameters (temperature, pressure, speed, etc.), and supports one-click adjustment of recipes or switching of production modes.

(2)Automated alarm system: Real-time monitoring of equipment status, automatic diagnosis of faults (such as abnormal temperature, blockage) and prompt solutions to reduce downtime.

(3)Data traceability: Record production data (such as batches, process parameters) to facilitate quality tracing and process optimization.

## 5.High degree of automation:

(1)Full process automation: From raw material transportation, mixing, extrusion, baking, packaging, the whole process is mechanically operated, reducing manual intervention and human errors.

(2)Labor cost savings: A single production line only requires 2-3 operators (traditional production lines require 8-10 people), and labor costs are reduced by more than 60%.

(3)24-hour continuous production\*\*: Stable operation guarantees production capacity, and the output per unit time is increased, which is suitable for large-scale order needs.



## About Us

We are a professional manufacturer of food machinery and we have been manufacturing nutrition cereal bar processing line for nearly 20 years. In addition to the Nutrition Bar snack processing line, we also manufacture lines for deep-fried food, pet feed, starch and many more. Each of our lines has basically a variety of moulds, which are adapted to produce a wide range of food products. We are not satisfied with the status quo but are constantly upgrading and innovating our products, adapting our production plant designs to the changing needs of the times and keeping up with the pace of progress. We are satisfied with the pursuit of excellence!

## Our Services

1. Recipe: The company's after-sales service department can provide free basic recipes and introduce more marketable recipe experts.
2. Training: after the installation and commissioning of the equipment can be on-site training of relevant operators, equipment easy to operate.
3. Return visit: regular after-sales telephone call back to customers, to help you solve relevant problems encountered in the use of equipment.
4. Maintenance: our company provides quality and inexpensive spare parts to the dealer side all year round, and provides equipment upgrades and new product development support, really let you have no worries.

5. Out of warranty maintenance: the company provides free maintenance for equipment damage caused by non-human factors during the warranty period. If the equipment is damaged due to human factors and force majeure, the company will provide maintenance services but charge the relevant fees.