ZEKO FOOD MACHINERY

FOOD EXTRUDER BUYER GUIDE

How to compare a machine, complete line and quotation before you buy



Prepared by Alex Sun

For snack, breakfast cereal, pet food and fish feed projects.

zekoequip.com | alex@zekoequip.com | +86 132 7634 6242

THE FIRST DECISION

Start with the product - not the model

A useful quotation begins with the product you need to sell. The same screw diameter can behave differently when formula, moisture, shape and finishing steps change.

Information to prepare

- Main raw materials and formula ranges
- Target shape, size, density and texture
- Moisture after drying and cooling
- Pack sizes and production hours
- Reference samples or product photos



A good supplier asks questions before naming a model

If a quotation arrives before the supplier understands the recipe and final product, treat its model number and capacity as preliminary. Ask what formula, inlet moisture, die, dryer setting and product quality were used for the quoted output.

Food Extruder Applications

SCOPE CONTROL

Separate the extruder from the complete line

A food extruder is one machine. Commercial output depends on preparation, drying, seasoning or coating, cooling and packing around it.

01
Prepare
Grinding, mixing and preconditioning

02
Feed
Stable dosing into the extruder

03
Extrude
Cook, shear, form and cut

04
Dry
Remove moisture without damaging shape

05
Finish
Season, coat, cool and pack

Put the quotation scope in writing

01
Included
List every machine, platform, conveyor, hopper, pipe, cable and control cabinet included.

02
Excluded
Record civil work, boiler, compressor, transformer, water treatment and local lifting.

03
Interface
State who supplies connecting conveyors, utilities, exhaust ducts, drains and interlocks.

04
Service
Define installation, commissioning, training, travel, warranty and spare-parts scope.

Food Extruder Selection Guide

DO NOT BUY A HEADLINE NUMBER

Capacity must be tied to product and moisture

Two quotations can show the same kg/h and still describe different plants. Capacity becomes useful when product, moisture basis, operating window and acceptance method are written beside it.



Stable saleable output

Measure product that meets agreed shape, texture and final moisture - not only material entering the extruder.

01

Product basis

Name the exact SKU or reference formula used for the capacity claim.

02

Moisture basis

Record moisture at extruder outlet, dryer inlet and finished discharge.

03

Operating window

State whether the figure is a trial peak, rated output or guaranteed stable output.

04

Bottleneck check

Match dryer duty, seasoning load, cooling time and packing speed to the extruder.

Capacity Planning Guide

ONE PLATFORM, DIFFERENT DEMANDS

Four common food extrusion routes

The extruder may be central to each route, but screw configuration, preconditioning, die design, drying and finishing logic change with the product.

ROUTE 01

Expanded snacks

Expansion ratio, cell structure, bulk density and seasoning pickup drive the setup.

Direct expansion / cutting / drying / seasoning

ROUTE 02

Breakfast cereal

Cooking degree, shape definition, density and crispness need tighter control.

Extrusion / forming / drying / coating or toasting

ROUTE 03

Pet food

Protein and fat balance, kibble density, coating and hygiene shape the line.

Preconditioning / extrusion / drying / coating / cooling

ROUTE 04

Fish feed

Pellet size, water stability, sinking or floating behaviour and oil application are central.

Grinding / extrusion / drying / oil coating / cooling

Ask for a process route drawing before finalising the list.

A route drawing exposes missing transitions, utility interfaces and bottlenecks before they become site changes.

View ZEKO Food Extruder

COMPARE LIKE WITH LIKE

What a technical quotation should show

Use the same checklist for every supplier. A lower price may simply reflect a shorter scope, different material grade or untested capacity basis.

- ☐ **01** Product and formula assumptions
- ☐ **02** Extruder model, screw diameter and working L/D
- ☐ **03** Screw and barrel configuration
- ☐ **04** Feeding method and difficult-ingredient controls
- ☐ **05** Die and cutter scope
- ☐ **06** Dryer type, heat source and moisture basis
- ☐ **07** Food-contact materials and surface treatment
- ☐ **08** Motor, voltage and control platform
- ☐ **09** Power, water, steam, gas and air requirements
- ☐ **10** Line dimensions and maintenance access
- ☐ **11** Installation, commissioning and training
- ☐ **12** Consumables, spares and warranty boundaries

RED FLAG

Do not compare quotations only by motor power or nominal kg/h. Align product basis, line scope, heat source, utilities, materials and acceptance test first.

PROVE THE AGREED RESULT

Write the acceptance method before the trial

A factory acceptance test works best when material, run conditions, sampling method and pass criteria are agreed before production begins.

1

Material

Use representative raw materials or document substitutions and likely effects.

2

Run conditions

Record feed rate, water or steam addition, screw speed, temperatures and dryer settings.

3

Output

Measure stable saleable output over an agreed period, not a short surge.

4

Quality

Check shape, dimensions, bulk density, texture, moisture and route-specific performance.

5

Open items

List adjustments, missing parts and repeat-test conditions with owners and dates.

6

Documents

Collect manuals, electrical drawings, spares lists, test records and training notes.

The goal is a traceable record of what the line produced, under which conditions, and what remains to be completed.

Factory Acceptance Test Guide

BEFORE REQUESTING A QUOTATION

One-page project brief

Fill in what you know. Unknown items can be tested or clarified during process design.

Product(s) and reference sample:

Target final moisture:

Main raw materials / formula range:

Heating source available:

Target output (kg/h) and operating hours:

Electric supply / voltage / frequency:

Shape, size, texture and bulk density:

Workshop dimensions and layout limits:

Send the brief to ZEKO

We will use it to discuss product route, equipment scope, capacity basis, utilities and test plan before preparing a proposal.

Alex Sun | ZEKO Food Machinery

alex@zekoequip.com | +86 132 7634 6242

Request a Production Line Proposal

Resources: **Food Extruder** **Selection Guide** **Applications** **Capacity Planning**