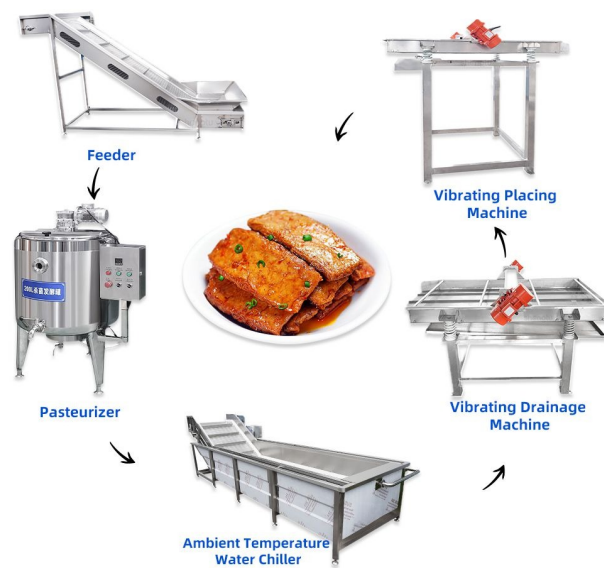


Almond, Walnut & Mixed-Nut Butter Line

Complete Turnkey Business Proposal



Supplier reference: real nut processing equipment representative of a compact butter line.

50-100 kg/h starter kernel input	20-80 μm trial texture range	2-4 launch recipes	5-7 entry operators
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Prepared for investment planning in Afghanistan and regional export markets. Final specifications, pricing, civil works, and utility loads require supplier quotation and site survey.

Executive Summary

This compact line converts released edible kernels into smooth or crunchy nut butter through inspection, optional recipe-specific roasting, cooling, coarse grinding, fine colloid milling, controlled blending, vacuum deaeration and filling. Almond, walnut and mixed recipes require separate validation because oil release and oxidation differ.

Why this project fits Afghanistan

- Afghan kernels can become higher-value branded spreads.
- A compact line supports almond, walnut and declared blends.
- Two-stage grinding gives controllable texture.
- Small batches reduce inventory and recipe risk.

Sanaatchi delivery scope

- Factory setup planning, supplier pre-qualification, and technical comparison
- Complete production-line and individual equipment supply
- Factory layout, utilities, civil-work coordination, installation, and commissioning
- Raw-material sourcing, trial-batch qualification, and repeat supply planning
- International logistics, customs documentation, operator training, spare parts, and after-sales support

Recommended configuration

For the lowest credible entry, select a 50-100 kg/h line with inspection table, small batch roaster, cooler, coarse grinder, colloid mill, jacketed blend tank, vacuum deaerator and semi-automatic jar filler.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Almond butter	Smooth or crunchy buyer-approved texture and roast	Retail, bakery and hospitality buyers
Walnut butter	Oxidation-controlled recipe with declared ingredients	Premium retail and bakery buyers
Mixed-nut butter	Declared nut percentages and allergen label	Retail and institutional buyers

Walnut butter oxidizes faster than many almond recipes. Roasting, grinding temperature, oxygen exposure, formulation and packaging must be validated separately.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Kernel inspection table	Rejects shell, rancid and defective kernels	Allergen-controlled clean area
2	Small batch roaster	Applies recipe-specific roast	Bypass for approved raw recipe
3	Cooling conveyor	Stops roasting before grinding	Filtered air
4	Coarse nut grinder	Prepares paste feed	Low-temperature contact
5	Colloid mill	Refines butter texture	Adjustable 20-80 micrometre range
6	Jacketed blend tank	Adds declared ingredients	Temperature and agitation control
7	Vacuum deaerator	Reduces entrained air and oxidation	Sized for paste viscosity
8	Semi-automatic jar filler	Fills and closes butter	One or two jar sizes

Equipment models are indicative and will be matched to the selected capacity, local raw-material tests, available utilities, and preferred automation level.

Reference Equipment Gallery



Supplier reference: real nut processing equipment representative of a compact butter line.



Supplier reference: real food-grade milling and collection equipment applicable to nut paste.

Images are supplier references for configuration discussion; final equipment appearance and model may differ.

Plant, Raw Materials & Utility Requirements

Raw materials

- Released edible Afghan almond and walnut kernels
- Only declared food-grade ingredients
- Food-grade jars, lids, labels and cartons
- Allergen changeover materials

Utilities & infrastructure

- Stable three-phase electricity
- Food-grade heat source where required
- Clean compressed air where specified
- Ventilated washable processing room
- Dry allergen-controlled packing and storage

Quality, safety and environmental controls

- Test kernels for rancidity, mold, aflatoxin risk and shell
- Validate a separate roast curve for each nut
- Control paste temperature during grinding
- Verify particle size, oil separation and recipe weights
- Use vacuum and oxygen-barrier closure where validated
- Complete allergen labeling, microbiology and shelf-life trials

A final factory layout must reserve safe forklift routes, maintenance clearances, raw-material segregation, finished-goods storage, fire protection, ventilation, and future expansion space.

Indicative Investment & Implementation Plan

LOW-ENTRY CONFIGURATION

Lowest entry uses small batches and semi-automatic jar filling. Automated roasting, nitrogen dosing, building, laboratory and inventory are excluded.

Component	Indicative range	Notes
Inspection, roasting and cooling	US\$4k-10k	50-100 kg/h entry
Coarse and colloid grinding	US\$5k-12k	Two-stage texture control
Blending and vacuum deaeration	US\$5k-11k	Small jacketed batch
Jar filling and quality tools	US\$3k-8k	Semi-automatic launch
Freight, installation and spares	US\$4k-9k	Confirm paste pumps and seals
Indicative low-entry total	US\$21k-50k	Building, kernels and working capital excluded

Implementation sequence

Phase 1	2-3 weeks	Confirm raw-nut specification, product grades, capacity and packs
Phase 2	2-4 weeks	Run acceptance trials with representative Afghan nuts
Phase 3	5-9 weeks	Manufacture, inspect and ship the selected equipment
Phase 4	3-5 weeks	Install, train and validate yield, process and shelf life

Ranges are planning targets for a low-cost entry configuration, exclude land, and remain subject to confirmed capacity, supplier quotation, freight, duties, exchange rates and site conditions.

Next Steps & Contact Information

Recommended next steps

- Confirm target products, hourly output, and packaging formats
- Test representative raw materials and document quality requirements
- Complete site survey covering electricity, water, fuel, drainage, roads, and warehouse space
- Request comparable technical and commercial quotations from shortlisted suppliers
- Finalize financing, logistics, installation, training, and spare-parts plan

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Research and image references

- <https://henanmethena.en.made-in-china.com/product/UYHpSerbfFky/China-500kg-Automated-Peanut-Cashew-Paste-Hazelnut-Machine-Bean-Butter-Production-Line-to-Making-Butter.html>
- <https://chinaoilmill.en.made-in-china.com/product/ovlQpONAYRYf/China-Small-Scale-Peanut-Paste-Butter-Production-Line-Machine.html>