

Chickpea Flour & Roasted-Chickpea Line

Complete Turnkey Business Proposal



Supplier reference: real compact grain and pulse flour-milling equipment suitable for chickpea-flour trials.

200-300 kg/h shared raw-chickpea intake	50-100 kg/batch starter roasting load	100-200 kg/h starter flour output	4-7 entry operators
---	---	---	---------------------------------------

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 modular workshop turns cleaned chickpeas into two distinct products. One branch mills food-grade chickpeas into besan with controlled particle size; the other roasts selected whole chickpeas, cools them quickly, applies an optional seasoning and packs a crisp snack. The branches share receiving, cleaning, grading and basic packing utilities but have separate recipes and food-safety controls.

Why this project fits Afghanistan

- Afghan chickpeas can supply both household flour and a shelf-stable local snack.
- Two small finishing branches diversify sales while sharing cleaning and grading equipment.
- Batch roasting supports recipe trials and modest launch volumes.
- Besan can serve bakeries, traditional foods, snack makers and institutional kitchens.

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

Start with a shared 200-300 kg/h intake, one 50-100 kg/batch roaster, a 100-200 kg/h mill, sifter, cooling table and semi-automatic packing. Commission one plain flour grade and one lightly salted roasted grade before adding dehulling, oil coating or automatic retail packing.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Chickpea flour (besan)	Buyer-approved granulation, color, moisture and cooking performance	Households, bakeries, restaurants and snack processors
Plain roasted chickpeas	Uniform roast, crisp texture and low scorched count	Retail snack and institutional buyers
Seasoned roasted chickpeas	Validated salt or spice dose with stable crispness	Convenience and branded snack channels
Screenings and hull fraction	Clean, separately collected and safety-checked	Approved feed users

Supplier listings for chickpea mills show small standalone grinders around the entry scale, while dry bean lines describe optional peeling, milling, sifting and packing. Industrial drum roasters can roast chickpeas as well as nuts and maize, but actual batch time and finished yield depend on chickpea size, starting moisture and recipe. Flour and roasted products require separate validated trials.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Cleaner, destoner and grader	Creates food-grade lots and uniform roasting sizes	Interchangeable screens for local chickpeas
2	Branch diverter and holding bins	Keeps flour and roasting lots identifiable	Food-grade, dust-tight and cleanable
3	Optional chickpea dehuller	Removes hull before lighter-color flour production	Bypass for whole-chickpea flour
4	Hammer or pin mill	Produces chickpea flour	100-200 kg/h starter output
5	Flour sifter and dust filter	Controls flour granulation and airborne dust	Oversize return and food-grade screens
6	Batch drum roaster	Roasts graded whole chickpeas with controlled agitation	50-100 kg/batch planning load
7	Cooling and seasoning section	Stops roasting and applies optional measured seasoning	Perforated cooling table plus small tumbler
8	Semi-automatic packers	Packs flour and roasted chickpeas without cross-contamination	Dedicated auger and granule filling contact parts

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 compact grain and pulse flour-milling equipment suitable for chickpea-flour trials.



Supplier reference: real industrial drum roaster applicable to controlled chickpea roasting.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Food-grade Afghan chickpeas segregated by size and variety
- Food-grade salt, spices and optional approved oil
- Moisture-barrier flour and snack pouches
- Labels, coding ink and secondary cartons

Utilities & infrastructure

- Stable three-phase electricity
- Selected safe electric or gas roasting heat source and exhaust
- Dust extraction for cleaning, milling and sifting
- Potable water for sanitation and any validated soak recipe
- Dry raw-material and finished-product storage

Quality, safety and environmental controls

- Accept chickpeas by moisture, size, insect damage, mold and foreign matter
- Prevent allergen and dust cross-contact with unrelated products
- Check flour granulation, color, moisture, odor and microbiological safety
- Record roast load, time, temperature, weight loss and scorched count
- Verify cooling before packing and seasoning weight per batch
- Validate pack seal, crispness or flour shelf life and lot coding

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 shares cleaning and grading, then uses one small flour mill and one batch roaster with simple cooling and semi-automatic packing. Land, building, chickpea inventory, automatic retail packing and optional dehulling are excluded.

Component	Indicative range	Notes
Shared cleaning, destoning and grading	US\$4k-9k	One common intake section
Flour milling, sifting and dust collection	US\$4k-10k	Optional dehuller priced separately
Batch roasting, cooling and seasoning	US\$5k-12k	One flexible starter roaster
Semi-automatic packing, electrical and spares	US\$4k-9k	Separate product-contact filling parts
Freight and clearance	US\$3k-7k	Consolidated workshop shipment
Indicative low-entry total	US\$20k-47k	Building, chickpea stock and automatic pouch line excluded

Implementation sequence

Phase 1	2-3 weeks	Confirm chickpea varieties, product recipes, flour mesh and pack sizes
Phase 2	2-4 weeks	Run separate milling and roasting trials and approve yields
Phase 3	4-8 weeks	Manufacture, inspect and ship the equipment
Phase 4	2-4 weeks	Install, train, validate sanitation and complete shelf-life trials

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

Sanaatchi Industrial Vision Group

Afghanistan Office: +93 779 819 820 | info@sanaatchi.com

China Office: +86 159 5171 6867 | china@sanaatchi.com

Website: www.sanaatchi.com

Research and image references

- https://www.made-in-china.com/products-search/hot-china-products/Chickpea_Grinder.html
- <https://coyotech.en.made-in-china.com/product/FOpnjwsuwPkc/China-Beans-Garbanzo-Lentil-Pea-Splitting-Peeling-Machine-Flour-Line-Manufacturer-Processing-and-Packaging-South-Africa.html>
- <https://china-shuliyemachine.en.made-in-china.com/product/zdFtKPUVEmkN/China-Industrial-Drum-Type-Roaster-Nuts-Roasting-Machine-Corn-Roaster.html>