

Whole-Wheat / Atta Flour Production Line

Complete Turnkey Business Proposal



Supplier reference: compact atta milling unit with pneumatic flour transfer and cyclones.

200-500 kg/h starter throughput	13-30 kW indicative connected load	3-5 entry operators	40-90 mesh supplier fineness reference
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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 turns locally purchased wheat into high-extraction whole-wheat and atta flour for naan bakeries, households and food-service buyers. Unlike a conventional white-flour roller mill, the launch configuration retains more of the bran and germ, uses a simpler milling circuit and allows the buyer to adjust texture by changing the sifter screen and flour blend.

Why this project fits Afghanistan

- Afghan wheat can support local flour conversion close to farming districts and urban bakeries.
- High-extraction atta serves naan, chapati, household and institutional-food demand.
- Adjustable sifting permits whole-wheat and lighter atta grades from one compact line.
- Bran-rich offcuts can be sold to feed users instead of discarded.

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 200-500 kg/h, a simple cleaner and destoner, one atta mill with pneumatic transfer, an adjustable sifter, a small flour blender and semi-manual packing. Approve flour color, granulation, ash, moisture and baking performance with local wheat before ordering.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Whole-wheat flour	High extraction with buyer-approved texture	Households, naan bakeries and restaurants
Sifted atta flour	Adjusted granulation and bran level	Retail flour and institutional kitchens
Coarse bran fraction	Clean, dry milling co-product	Livestock-feed users

Supplier references for compact atta mills show 200-500 kg/h, approximately 13.2-18 kW for the milling unit and 40-90 mesh adjustment. The quoted line must also include cleaning, destoning, magnetic protection, controlled sifting, dust collection and packing; a standalone mill is not a complete food factory.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Intake hopper and aspiration cleaner	Meters wheat and removes dust, chaff and large impurities	Food-grade contact surfaces and dust outlet
2	Compact destoner	Separates stones and dense foreign material	Prove separation with buyer wheat sample
3	Magnetic separator	Protects the mill from ferrous contamination	Accessible drawer or grate magnet
4	Atta flour mill	Produces high-extraction flour with automatic feed	200-500 kg/h supplier reference
5	Cyclone and pneumatic transfer	Transfers flour and reduces airborne dust	Include blower, cyclone, ducts and airlock
6	Adjustable flour sifter	Controls flour texture and separates coarse bran	Interchangeable screens for approved grades
7	Ribbon blender	Equalizes flour from successive milling batches	Food-grade 200-500 kg batch size
8	Scale and bag sealer	Packs retail and wholesale flour	Semi-manual 1-25 kg launch scope

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: compact atta milling unit with pneumatic flour transfer and cyclones.



Supplier reference: alternate view of the small 200-500 kg/h flour-milling arrangement.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Afghan food-grade wheat by approved variety
- Retail pouches or woven flour bags
- Labels, thread or heat-seal consumables
- Approved cleaning and sanitation materials

Utilities & infrastructure

- Stable three-phase electricity
- Dust extraction and safe ventilation
- Dry raw-wheat and finished-flour storage
- Potable water only for controlled conditioning and sanitation
- Pest-control and food-hygiene program

Quality, safety and environmental controls

- Inspect wheat moisture, infestation, odor and foreign matter at receipt
- Record magnet and destoner checks every shift
- Approve flour moisture, ash, granulation and baking performance
- Prevent allergen, pest and cleaning-chemical contamination
- Control flour dust, guarding and housekeeping to reduce fire and respiratory risk

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 practical entry uses one compact atta mill, basic cleaning and destoning, an adjustable sifter and semi-manual packing. Land, building and wheat inventory are excluded.

Component	Indicative range	Notes
Cleaning and atta-milling package	US\$6k-13k	Compact Chinese equipment with essential dust control
Sifter, blender and semi-manual packing	US\$3k-7k	Launch with only two approved pack formats
Electrical, ducts and local installation	US\$2k-5k	Local noncritical supports and connections
Freight, clearance and initial spares	US\$3k-7k	Confirm packed dimensions before quotation
Indicative low-entry total	US\$14k-32k	Land, building and wheat working capital excluded

Implementation sequence

Phase 1	1-2 weeks	Confirm flour grades, pack sizes, wheat sample and buyer baking tests
Phase 2	2-3 weeks	Compare complete scopes and conduct supplier sample milling
Phase 3	4-7 weeks	Manufacture, inspect and ship the selected line
Phase 4	2-3 weeks	Install, train, trial mill and approve production lots

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

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