

Cottonseed Delinting Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real cottonseed delinting line equipment.

1.0-1.5 t/h single-machine reference	47.2 kW delinter reference power	≤2.5% supplier residual-lint claim	1 cut recommended launch
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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

A controlled mechanical saw-delinting line removing residual short lint from properly ginned cottonseed through seed receiving, moisture and foreign-material checks, metered feeding, one or more saw-delinter passes, air separation of linters and motes, seed cooling and protected storage. It produces saleable cotton linters and cleaner seed for oil processing or planting only after the relevant quality tests.

Why this project fits Afghanistan

- Cottonseed from local ginneries can yield an additional short-fibre product.
- Delinted seed can improve handling for oil-mill preparation when specifications are met.
- One machine offers a medium entry before a 100-500 t/day multi-cut complex.
- Separate linter and seed buyers are required before investment.

Sanaatchi delivery scope

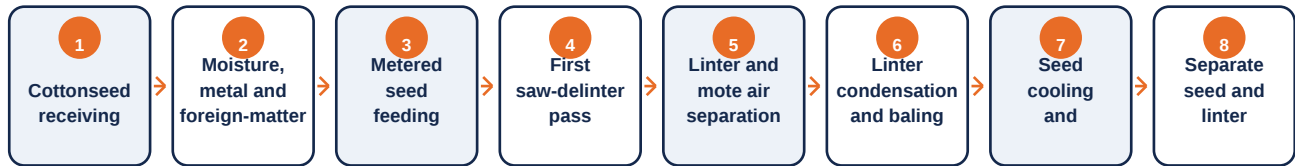
- Factory setup planning, supplier pre-qualification, and technical comparison
- Complete production-line and individual equipment supply
- Factory layout, utilities, civil-work coordination, installation, and commissioning
- Raw-material sourcing, trial-batch qualification, and repeat supply planning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

Recommended configuration

For a medium entry, trial one 1.0-1.5 t/h, approximately 47 kW saw delinter with metered seed feed, magnet, aspiration, linter condenser and separate seed discharge. Start with one cut; add a second cut only if linter buyers and oilseed tests justify lower residual lint without unacceptable kernel damage.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Cotton linters	Buyer-agreed cut, cellulose quality, moisture, trash and contamination	Cellulose, paper or specialty industrial buyers
Delinted cottonseed	Controlled residual lint, kernel damage, moisture and heating	Cottonseed oil processors or approved seed users
Motes and rejects	Segregated and assessed before recovery	Approved recovery or disposal

Supplier references range from a 1.0-1.5 t/h, 47.2 kW machine to automated 100-500 t/day multi-cut plants. The entry proposal is not a full oil mill and does not claim planting-seed suitability. Residual lint, kernel breakage, free fatty acid development, heating, dust and fire performance require trials.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Seed receiving hopper and meter	Feeds a stable cottonseed rate	1.0-1.5 t/h trial basis
2	Magnet and aspiration inlet	Removes metal and loose dust	Accessible inspection points
3	Saw delinter	Strips short residual lint from seed	About 200 saws; final model by trial
4	Lint air duct and condenser	Separates and collects short fibre	Balanced against saw chamber
5	Mote separator	Removes heavier rejects from linter stream	Adjustable air and screen settings
6	Seed cooler or aerated conveyor	Prevents hot seed storage	Discharge temperature limit
7	Small linter press	Compacts recovered linters	Buyer-agreed bale format
8	Sampling and test station	Checks seed and linter after each pass	Residual lint, damage and moisture

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



Made-in-China supplier reference: real cottonseed delinting line equipment.



Made-in-China supplier reference: second real industrial configuration for cottonseed delinting line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Properly ginned cottonseed by known lot and moisture
- Bale ties and wrap for cotton linters
- Replacement saws, spacers, brushes and bearings
- Cleaning, lubrication and fire-control consumables

Utilities & infrastructure

- Stable three-phase electricity matched to the confirmed motor and starting loads
- High-volume dust extraction with fire-safe ducting, collection and housekeeping
- Dry covered raw-material and finished-product storage with lot separation
- Fire detection, suitable extinguishing equipment and controlled ignition sources
- Safe access, guarding, lifting aids and preventive-maintenance workspace

Quality, safety and environmental controls

- Sample incoming seed for moisture, residual lint, damage and heating
- Run mass balance of seed, linters, motes and dust
- Measure residual lint and kernel damage after each cut
- Inspect saws, spacers, ribs, brushes and clearances
- Control bearing temperature, dust, static and ignition sources
- Test stored seed temperature and oil-quality indicators before release

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 credible entry is one tested delinter with a single cut, simple linter collection and protected seed discharge. Multi-cut automation, oil extraction, buildings and working cottonseed are excluded.

Component	Indicative range	Notes
One saw delinter and metered feed	US\$20k-28k	Supplier reference around US\$20k-25k
Aspiration, condenser and seed handling	US\$9k-24k	One-cut arrangement
Small linter press and test tools	US\$6k-16k	Buyer-agreed bales
Electrical, fire safety and installation	US\$7k-18k	Dust-intensive process
Freight, clearance and critical spares	US\$8k-20k	Saws, brushes and bearings
Indicative low-entry total	US\$50k-106k	Oil mill, building and seed stock excluded

Implementation sequence

Phase 1	2-4 weeks	Confirm feedstock, buyer specification, capacity, site utilities and test protocol
Phase 2	2-5 weeks	Run representative material trials and approve the exact machine configuration
Phase 3	5-12 weeks	Manufacture, inspect and ship the approved equipment and critical spares
Phase 4	2-6 weeks	Install, commission, train operators and validate saleable output

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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