SANAATCHI
INDUSTRIAL VISION GROUP

Talc Grinding & Classification Line

Complete Turnkey Business Proposal

Made-in-China supplier reference: real talc grinding & classification line equipment.

1-3 t/h	200-325 mesh	1 grade	12-20
screened starter output	**launch grade range**	**initial market**	**entry workforce**

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 medium-industrial dry mineral line converting released Afghan talc ore into buyer-specified ground talc through covered receiving, hand sorting or optical colour sorting where justified, staged crushing, magnetic metal removal, controlled drying, buffer feeding, gentle Raymond or air-classifier milling, dynamic classification and oversize return, cyclone and baghouse collection, product silos, laboratory release and valve- or jumbo-bag packing. Beneficiation and surface coating are separate unless contracted.

Why this project fits Afghanistan

- Afghan talc can retain more value through controlled grinding and verified mineral safety.
- One industrial grade is simpler and safer than claiming cosmetic, pharmaceutical or food use.
- Dynamic classification improves repeatability and avoids selling unverified mesh-only powder.
- Asbestos screening, silica control and dust exposure management are non-negotiable.

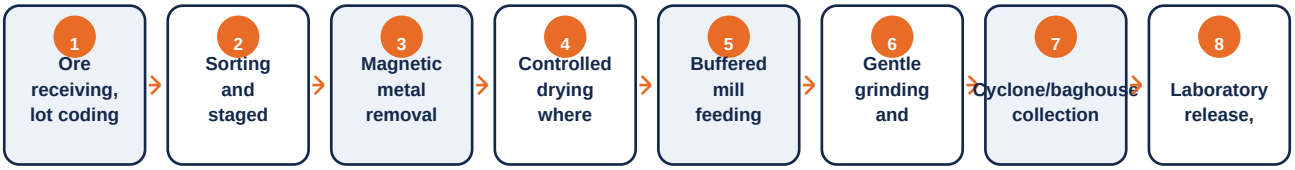
Sanaatchi delivery scope

- 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 only after one mine bench and one buyer approve mineralogy, asbestos absence, whiteness and particle-size distribution. Screen a 1-3 t/h line producing one 200-325 mesh industrial grade with jaw/hammer crushing, magnet, dryer only if required, one Raymond mill with dynamic classifier, cyclone, baghouse, silo, bagger and an outsourced XRD/asbestos protocol plus in-house whiteness and size checks.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Industrial ground talc	Buyer-approved mineralogy, no detected asbestos by named method, whiteness, moisture and particle-size distribution	Ceramics, coatings, putty and selected polymer compounders
Coarser technical talc	Separate buyer grading and chemistry after trials	Selected construction and ceramic formulations

Talc softness does not remove mineral-health risk. Every deposit zone requires representative petrography/XRD and accredited asbestos analysis; cosmetic, food and pharmaceutical claims require separate regulatory qualification. Supplier acceptance measures dry feed and product t/h, kWh/t, whiteness, moisture, top size, full particle distribution, iron pickup, oversize return, dust emissions and bag weight.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Sorting tables, crusher and magnet	Removes waste and makes clean mill feed	Mine-lot controlled
2	Optional low-temperature dryer	Controls seasonal feed moisture	Only after moisture study
3	Raymond or gentle roller mill	Grinds soft platy talc without excess contamination	1-3 t/h basis
4	Dynamic air classifier	Controls product distribution and returns oversize	200-325 mesh launch
5	Cyclone and pulse baghouse	Recovers powder and controls respirable dust	Negative pressure
6	Product silo and discharge aid	Buffers one released grade	Dry anti-bridging design
7	Valve/FIBC packing station	Forms traceable industrial packs	Buyer pack format
8	Mineral powder laboratory	Checks whiteness, moisture and distribution	Accredited mineral-safety support

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 talc grinding & classification line equipment.

Made-in-China supplier reference: second real machine configuration for talc grinding & classification line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Released Afghan talc ore by controlled mine bench and mineralogy
- Clean hot-air fuel only when drying is required
- Valve bags or FIBCs, pallets, wrap and labels
- Mill wear parts, filters, seals and certified sampling supplies

Utilities & infrastructure

- Stable three-phase power and motor-starting study
- Covered segregated raw-ore and finished-powder storage
- Enclosed transfers, baghouse and workplace dust monitoring
- Compressed air for filters and packing
- Hygiene facilities and respiratory-protection programme

Quality, safety and environmental controls

- Release every ore lot for mineralogy and accredited asbestos result
- Control sorting, moisture, mill feed and classifier speed
- Trend t/h, kWh/t, pressure and filter differential
- Test distribution, whiteness, moisture and iron contamination
- Retain samples and trace every bag to mine lot
- Do not market regulated grades without buyer and legal qualification

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

The lowest credible line makes one industrial 200-325 mesh talc grade with mineral-safety testing and dust control. Ultrafine/coated grades, mine fleet, building and working stock are excluded.

Component	Indicative range	Notes
Sorting, crushing, magnet and feed handling	US$35k-95k	One mine-lot route
Raymond mill, classifier and dust collection	US$90k-250k	1-3 t/h at 200-325 mesh
Silo, packing and laboratory	US$35k-95k	Industrial grade only
Civil works, freight, installation and spares	US$55k-160k	Power and dust-control dependent
Indicative installed project total	US$215k-600k	Mine fleet, building and working capital excluded

Implementation sequence

Phase 1	2-5 weeks	Confirm product specification, representative raw material, buyer, capacity, site and utilities
Phase 2	3-7 weeks	Run supplier trials with the buyer material and freeze the balanced machine, tooling and utility scope
Phase 3	8-22 weeks	Manufacture or refurbish, inspect, document and ship the contracted equipment
Phase 4	3-12 weeks	Install, commission, train operators and pass material-specific acceptance tests

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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