

Compost Screening & Bagging Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real compost screening & bagging line equipment.

1-2 t/h screen basis	10-25 kg launch bags	1 grade controlled product	4-7 entry workforce
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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 micro/workshop finishing line receiving fully matured compost and converting it into a consistent bagged soil amendment through quarantine inspection, removal of plastics and metal, controlled feeding, enclosed trommel screening, oversize and contaminant separation, optional recipe blending only after agronomic approval, surge storage, gross weighing into open-mouth 10-25 kg bags, stitching or heat sealing, coding, check weighing and retained-sample release. Active composting and waste sanitation are outside this line.

Why this project fits Afghanistan

- Screened bagged compost can serve nurseries, farms and urban gardening.
- A finishing line is much cheaper than a complete municipal composting plant.
- One unblended grade reduces formulation and labeling risk.
- Maturity, pathogens, weed seeds, salts, plastics and bag weight determine buyer trust.

Sanaatchi delivery scope

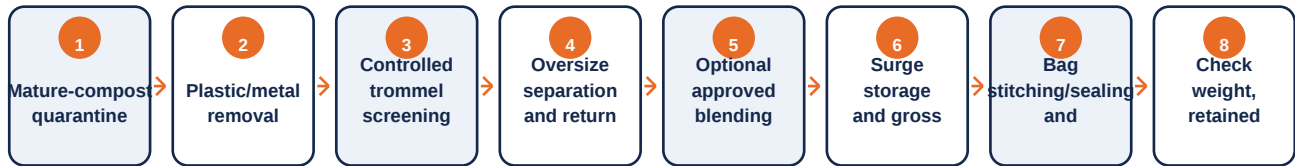
- Factory setup planning, supplier pre-qualification, and technical comparison
- Complete production-line and individual equipment supply
- Factory layout, utilities, civil-work coordination, installation, and commissioning
- Raw-material sourcing, trial-batch qualification, and repeat supply planning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

Recommended configuration

Accept only fully stabilized compost with a documented source. Start with one screened unblended soil-amendment grade, a small covered feed hopper, magnet/manual picking, enclosed 1-2 t/h trommel with dust control, oversize return bin, surge hopper, semi-automatic gross weigher for 10-25 kg open-mouth bags, stitcher, coder and check scale. Do not bag hot, odorous or pathogen-unsafe material.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Screened bagged compost soil amendment	Declared feed source, screen size, maturity, moisture, pH, EC, organic matter, contaminants, pathogens and net mass	Nurseries, farms, landscaping and household gardening

This line does not make unstable waste safe. The supplier must provide mature compost meeting the agreed pathogen, weed-seed, foreign-material and stability criteria before it reaches the hopper. Release testing covers temperature, odor, respiration or germination maturity indicator, moisture, pH, electrical conductivity, organic matter, nutrients if claimed, plastics/glass/metal, relevant pathogens and legal label/net weight.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Covered receiving hopper and picking belt	Quarantines and cleans mature compost	Documented source
2	Magnet and enclosed trommel screen	Removes metal and controls particle size	1-2 t/h
3	Oversize/contaminant bins	Separates reject and reusable oversize	Clearly segregated
4	Optional small ribbon mixer	Blends only approved recipe	Excluded for unblended launch
5	Surge hopper and gross weigher	Fills open-mouth bags	10-25 kg
6	Stitcher, coder and check scale	Closes and verifies every pack	Lot traceability

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 compost screening & bagging line equipment.



Made-in-China supplier reference: second real machine configuration for compost screening & bagging line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Fully matured source-documented compost
- Approved amendment only if an agronomic formula is declared
- Breathable or moisture-suitable open-mouth sacks
- Thread, labels, ink and retained-sample bags

Utilities & infrastructure

- Stable three-phase electricity with verified connected load
- Guarded machinery, lockout, ventilation and fire protection
- Covered segregated raw-material and finished-goods storage
- Maintenance tools, safe lifting and critical spare parts
- Washable covered receiving and packing floor
- Local extraction at screen and bag filler
- Quarantine and reject areas protected from runoff

Quality, safety and environmental controls

- Quarantine each compost lot and verify maturity
- Inspect plastics, glass, metal and odor
- Test moisture, pH, EC and organic matter
- Verify pathogens and weed-seed criteria
- Check screen cut and oversize/reject rate
- Check every bag weight, code and retained sample

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 entry screens and bags one already-mature compost grade. Windrow turning, sanitation, drying, granulation and fertilizer enrichment are separate processes.

Component	Indicative range	Notes
Receiving, picking and enclosed trommel	US\$8k-22k	1-2 t/h mature compost
Surge hopper, weigher, conveyor and stitcher	US\$7k-18k	10-25 kg bags
Dust control, test kit and floor interfaces	US\$5k-13k	Safe finishing
Freight, setup and spares	US\$4k-10k	Bag trials
Indicative installed low-entry total	US\$24k-63k	Composting plant, building and stock 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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