

Rubber Pavers & Livestock Mats Production Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real rubber pavers & livestock mats production line equipment.

1 product controlled launch	20-40 mm screened thickness	100-160 t press basis	7-11 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 small downstream moulding line producing thick rubber pavers or livestock mats from purchased qualified tire crumb through size screening, controlled binder and pigment weighing, high-shear coating, mould filling, levelling, heated hydraulic compression or controlled ambient curing, demoulding, conditioning, trimming and application-specific load, abrasion, slip, drainage, compression, odour and ageing tests.

Why this project fits Afghanistan

- Purchased crumb permits a low-entry plant without tire shredding.
- Pavers serve walkways and compounds; livestock mats serve dairy and stable floors.
- Thicker products need higher mould charge and press force than ordinary tiles.
- Slip, drainage, compression recovery, odour and cleanability must match the chosen end use.

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

Launch only one product: either a 500 x 500 mm interlocking outdoor paver or one livestock-mat panel and thickness. Buy clean 1-4 mm crumb, use one metered mixer, one guarded multi-daylight 100-160 t heated press, dedicated moulds, conditioning racks and product tests. Do not combine playground-tile, paver and animal-mat claims without separate formulations and validation.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Rubber outdoor paver or livestock mat	One approved geometry, thickness, density, hardness, slip, abrasion, compression, drainage, odour and ageing specification	Walkways and compounds or livestock facilities-not both without separate validation

This line is distinct from thin flooring tiles. Pavers require interlock, abrasion, freeze/thaw and drainage checks; livestock mats require hoof-slip, compression recovery, urine/cleaner resistance, hygiene and edge-curl tests. Acceptance fixes crumb grading, binder ratio, charge mass, pressure, temperature and cure, then verifies dimensions, density, tensile, abrasion, compression, slip and ageing.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Crumb screen and scales	Controls particle and recipe	1-4 mm qualified crumb
2	Metered binder mixer	Coats crumb uniformly	Timed batch
3	Dedicated paver or mat mould set	Defines one launch product	One thickness
4	Guarded heated hydraulic press	Consolidates and cures product	100-160 t
5	Conditioning and trim station	Completes cure and edges	Ventilated racks
6	End-use laboratory	Tests slip, abrasion, compression and ageing	Paver or livestock protocol

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 rubber pavers & livestock mats production line equipment.



Made-in-China supplier reference: second real machine configuration for rubber pavers & livestock mats production line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Qualified clean tire-derived rubber crumb
- Approved polyurethane binder with SDS and cure data
- Pigment or optional EPDM surface granule only after validation
- Release media, wrap, labels and pallets

Utilities & infrastructure

- Stable three-phase electricity with verified connected load
- Guarded machinery, lockout, ventilation and fire protection
- Dry segregated raw-material and finished-goods storage
- Maintenance tools, safe lifting and critical spare parts
- Local exhaust and controlled cure/conditioning zone
- Binder spill containment and chemical PPE

Quality, safety and environmental controls

- Sieve every crumb lot and verify contamination
- Control binder ratio, mix time and mould charge
- Record pressure, temperature and cure time
- Gauge dimensions, density, warpage and interlock
- Test slip, abrasion and compression recovery
- Validate drainage/weathering or livestock hygiene as applicable

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 buys tested crumb and makes one paver or livestock-mat specification. Tire recycling, multiple mould families and certified playground products are excluded.

Component	Indicative range	Notes
Screening, weighing and mixer	US\$8k-20k	Purchased-crumb entry
Press, one mould family and racks	US\$22k-58k	One thick product
Laboratory, ventilation and trim	US\$10k-28k	End-use release
Freight, installation and spares	US\$10k-25k	Cure trials included
Indicative installed low-entry total	US\$50k-131k	Tire recycling, building and materials 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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