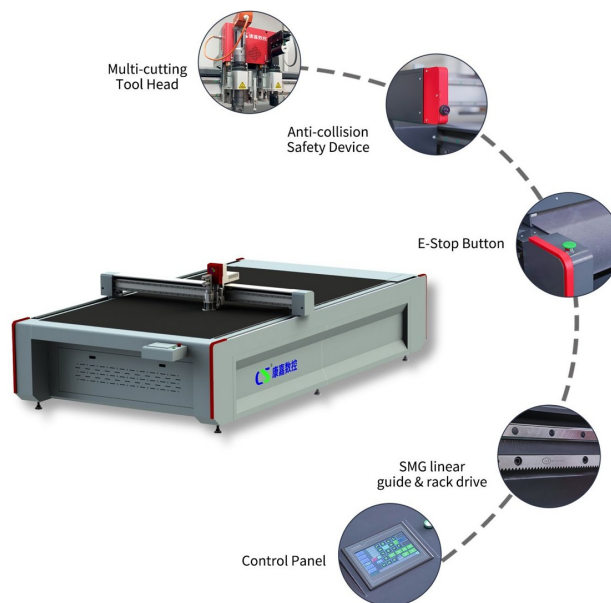


EPS Insulation Panels & Shapes Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real eps insulation panels & shapes line equipment.

approved sample market gate	defined range launch scope	performance test release gate	batch records traceability
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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

Produces expanded-polystyrene insulation blocks, cut panels and formed packaging or architectural shapes through bead pre-expansion, maturation, block moulding, steam treatment, controlled ageing, cutting/profiling, packing and density/thermal checks.

Why this project fits Afghanistan

- Approve an installed sample and buyer acceptance criteria.
- Launch with a defined product family and documented tool settings.
- Keep material and quality records for every batch.

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 a defined density/thickness range and a safe steam, ventilation and fire-control design. Confirm resin, pentane/emissions handling, board ageing, fire classification and local installation demand before equipment selection.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
EPS insulation panels and shapes	Density, thickness, thermal resistance, compressive strength, dimensional stability, flame-retardant grade where applicable and cut/profile tolerance	Buildings, cold rooms, packaging, façades and insulation distributors

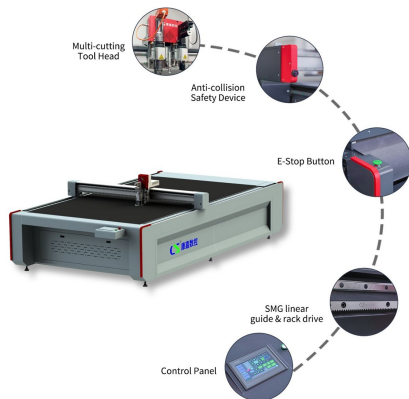
Supplier scope, site utilities, test requirements and acceptance sample must be confirmed before purchase.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	EPS pre-expander	Controls bead density	Approved resin/density recipe
2	Maturation silos	Stabilises expanded beads	Ageing record
3	Block mould and steam system	Fuses beads into blocks	Block density/steam cycle
4	Hot-wire cutting/profiling	Makes boards and shapes	Thickness/profile tolerance
5	EPS laboratory	Releases insulation product	Density/compression/thermal checks

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 eps insulation panels & shapes line equipment.



Made-in-China supplier reference: second real machine configuration for eps insulation panels & shapes line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- EPS beads, approved flame-retardant resin where specified, steam/water, packaging film, hot-wire spares and labels

Utilities & infrastructure

- Stable electricity, covered material storage and protected finished-goods handling
- Guarded equipment, essential spares, documented maintenance and product-specific safety controls

Quality, safety and environmental controls

- Confirm safe bead storage, ventilation and fire controls before commissioning
- Control density, block ageing, board thickness and hot-wire accuracy
- Test density, compressive strength, dimensional stability, thermal performance and declared fire classification

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

EPS is a fire-sensitive polymer process: density, ageing, installation system and the declared fire grade must be controlled rather than assumed from generic foam equipment.

Component	Indicative range	Notes
Pre-expansion, silos and block moulding	US\$180k-650k	Medium industrial EPS scope
Steam, cutting, packing and safety systems	US\$120k-420k	Board/shape product range
Utilities, lab, freight and installation	US\$100k-330k	Fire/emissions controls included
Indicative total	US\$400k-1.4m	Building and resin 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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