

PU Lightweight Artificial-Stone Panels Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real pu lightweight artificial-stone panels line equipment.

approved sample market gate	defined profiles launch scope	controlled cure quality 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

Casts lightweight polyurethane artificial-stone panels in textured moulds, followed by controlled curing, edge trimming, colour/finish work, inspection and packing.

Why this project fits Afghanistan

- Approve a physical sample and the intended installation system.
- Launch with a limited, saleable profile or finish range.
- Keep batch records for material, mould and quality checks.

Sanaatchi delivery scope

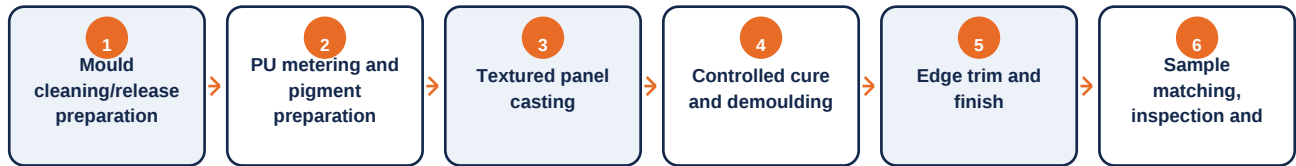
- Factory setup planning, supplier pre-qualification, and technical comparison
- Complete production-line and individual equipment supply
- Factory layout, utilities, civil-work coordination, installation, and commissioning
- Raw-material sourcing, trial-batch qualification, and repeat supply planning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

Recommended configuration

Begin with a limited collection of approved moulds and sample panels. The line must use a documented two-component PU system, ventilation, PPE and tests for colour, geometry and mounting.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Lightweight PU artificial-stone panels	Texture fidelity, panel dimensions, density, cure, colour consistency, edge quality and mounting compatibility	Interior fit-out, shops, restaurants, housing developers and decorative-material dealers

The supplier must prove the exact equipment scope, material safety data and acceptance sample before purchase.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	PU dispensing unit	Meters resin system	Ratio and batch record
2	Textured panel moulds	Creates stone appearance	Limited launch collection
3	Cure/trim station	Stabilises and sizes panels	Ventilated cure area
4	Finish/QC bench	Matches colour and texture	Approved control sample

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 pu lightweight artificial-stone panels line equipment.



Made-in-China supplier reference: second real machine configuration for pu lightweight artificial-stone panels line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Specified PU resin system, approved pigments, release agent, touch-up finish, mounting samples and protective cartons

Utilities & infrastructure

- Stable power, extraction/ventilation and dry covered storage
- Guarded cutting equipment, documented maintenance and essential spares

Quality, safety and environmental controls

- Review SDS and worker protection
- Compare every batch to an approved texture/colour sample
- Check cure, edge dimensions, warpage and adhesive/mechanical fixing compatibility

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

This is a lightweight decorative panel process, not a natural-stone cutting factory; mould and cure quality determine the product.

Component	Indicative range	Notes
Metering/mixing and extraction	US\$15k-45k	Controlled PU casting
Moulds, trimming and finishing	US\$12k-50k	Selected stone textures
Indicative entry total	US\$35k-110k	Chemical inventory 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

Sanaatchi Industrial Vision Group

Afghanistan Office: +93 779 819 820 | info@sanaatchi.com

China Office: +86 159 5171 6867 | china@sanaatchi.com

Website: www.sanaatchi.com

Research and image references

- <https://www.alibaba.com/showroom/pu-stone-panel-making-machine.html>
- https://www.made-in-china.com/products-search/hot-china-products/PU_Foaming_Machine.html