

Glass-Reinforced Gypsum (GRG) Panel Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real glass-reinforced gypsum (grg) panel line equipment.

local gypsum core input	reusable moulds process basis	dry finish release gate	small team entry operation
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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 mould-based line forming lightweight GRG architectural panels with high-alpha gypsum, chopped glass fibre, inserts and controlled curing; it produces shaped interior panels, coves and feature components, not structural façade elements.

Why this project fits Afghanistan

- Use local gypsum only after test casting.
- Mould quality and controlled drying govern saleable finish.
- Launch with a focused design range and contractor samples.

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

Qualify one panel family with project-specific moulds, engineered inserts and installer-approved lifting/fixing details before accepting large architectural packages.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
GRG architectural panels	Panel geometry, thickness, fibre content, insert layout, weight, fixing points and surface finish	Hotels, offices, retail interiors, auditoria and specialist fit-out contractors

Supplier must demonstrate the selected mould, recipe and acceptance sample before purchase.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	GRG spray/lay-up station	Builds fibre-reinforced shell	Defined fibre/gypsum recipe
2	Architectural moulds and support frames	Forms exact geometry	Project-approved shapes
3	Insert and stiffener fixtures	Controls installation interface	Engineer-approved locations
4	Finishing and trial-fit area	Releases dimensionally accurate panels	Dry assembly check

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 glass-reinforced gypsum (grg) panel line equipment.



Made-in-China supplier reference: second real machine configuration for glass-reinforced gypsum (grg) panel line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- High-alpha gypsum, chopped glass fibre, water, approved inserts and stiffeners
- Release agent, repair/finish materials, labels, crates and edge protection

Utilities & infrastructure

- Covered dry workshop and finished-goods storage
- Dust control, guarded tools and safe lifting
- Measured water, approved mould release and batch records
- Workshop electricity, ventilation and packing area

Quality, safety and environmental controls

- Record fibre dosage, thickness, insert locations and cure conditions
- Check geometry, panel weight, fixing points, visible finish and trial fit

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

GRG must be sold with approved mould, inserts and fixing design. It is a specialist architectural component, not a generic gypsum panel.

Component	Indicative range	Notes
Lay-up equipment and starter moulds	US\$20k-60k	Small architectural package
Fixtures, finishing and lifting aids	US\$15k-45k	Project-specific geometry
Indicative entry total	US\$40k-120k	Large moulds and design 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

- <https://www.alibaba.com/showroom/grg-panel-mould.html>
- https://www.made-in-china.com/products-search/hot-china-products/GRG_Panel_Mould.html