

Large Gypsum-Board & Drywall Factory

Complete Turnkey Business Proposal



Made-in-China supplier reference: real large gypsum-board & drywall factory equipment.

confirmed scope investment gate	representative trial acceptance	site-ready implementation	quality record 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

A large integrated gypsum-board factory converting calcined Afghan gypsum, water, additives and facing papers into tested drywall boards through rock receiving, crushing, calcination, stucco storage, slurry mixing, continuous board forming, setting, multi-zone drying, trimming, stacking, laboratory release and dispatch.

Why this project fits Afghanistan

- Confirm the precise customer product, target machine or plant flow before procurement.
- Approve representative trials, measured outputs and critical safety/quality requirements before release.
- Document specifications, operating settings, inspections and maintenance responsibilities.

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

Treat this as a strategic project with a confirmed gypsum reserve and an off-take route. Confirm gypsum purity and moisture, paper supply, board thickness/width portfolio, drying energy, power, water, plant footprint, fire/moisture standards, logistics, maintenance capacity and experienced line supplier before investment.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Gypsum board and drywall panels	Approved board types, thickness and width, gypsum purity, facing paper, density, edge profile, moisture/fire performance, length tolerance and packing	Housing, offices, retail, schools, contractors, drywall installers and building-material distributors

Supplier scope, source materials, utility loads, acceptance test, installation, spare parts and operating responsibility must be confirmed before purchase.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Gypsum receiving/crushing/calination	Produces controlled stucco	Purity and calcination
2	Paper and slurry preparation	Controls board formulation	Paper alignment/density
3	Continuous board forming line	Forms sheet and edge profile	Width/thickness
4	Setting dryer and finishing	Dries, cuts and stacks boards	Moisture and speed
5	Board laboratory/packing	Releases saleable panels	Strength and dimensions

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 large gypsum-board & drywall factory equipment.



Made-in-China supplier reference: second real machine configuration for large gypsum-board & drywall factory.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Proven Afghan gypsum, facing paper, starch/foam/retarder and approved additives, water, packaging, dryer fuel, cutting consumables, laboratory materials and critical spares

Utilities & infrastructure

- Stable three-phase electricity, protected material/finished-product storage, calibrated quality-control instruments and appropriate process ventilation
- Documented maintenance, critical spares, site safety procedures and product-specific environmental controls

Quality, safety and environmental controls

- Validate gypsum reserve, paper supply, product standards, energy tariff/fuel, demand, logistics, permits and experienced EPC/operation before contracting
- Control calcination, slurry density, paper alignment, board thickness, set, dryer profile, residual moisture, edge quality, dimensions, sag and fire/moisture claims
- Test every production lot for dimensions, mass, flexural strength, moisture, edge integrity and specified fire/moisture performance; maintain dust and worker-safety systems

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

A large gypsum-board line needs dependable paper, heat and gypsum quality as much as machinery. Start only after reserve, off-take and full energy model are bankable.

Component	Indicative range	Notes
Gypsum preparation, calcination and stucco handling	US\$8m-28m	Reserve and capacity dependent
Continuous board line, dryer and finishing	US\$18m-65m	Width/speed/product mix
Laboratory, packing, utilities and installation	US\$6m-22m	Quality and energy scope
Indicative strategic project total	US\$32m-115m	Mine, land, financing and working capital 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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