



Decorative Gypsum Mouldings Workshop

Complete Turnkey Business Proposal



Made-in-China supplier reference: real decorative gypsum mouldings workshop equipment.

8-12 launch mould designs	2 mixers alternating batch basis	6-12 entry workforce	1 shift starter 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 micro/workshop production cell converting released casting plaster into cornices, ceiling roses, frames and selected decorative elements through design and master-pattern preparation, silicone/FRP mould making, measured plaster and water dosing, mixing, optional glass-fibre reinforcement, manual or semi-automatic casting, vibration and deaeration, demoulding, rack drying, trimming, sanding, inspection and protected packing.

Why this project fits Afghanistan

- Decorative plaster products use local design and labour while requiring modest imported machinery.
- Reusable moulds let the workshop expand designs without replacing the whole process.
- A curated 8-12 design collection is easier to sample and control than a large untested catalogue.
- Straightness, repeatable setting and careful drying determine installer acceptance.

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 as a mould-led workshop with 8-12 proven designs, one dust-controlled plaster store, calibrated bench scales, two small mixers, vibration tables, reusable silicone/FRP moulds, straight drying racks, trimming/sanding extraction, inspection templates and padded packing. Add a continuous automatic cornice machine only after daily repeat orders justify its 30-60 metre footprint.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Gypsum cornice and coving	Approved profile, length, straightness, surface, moisture, strength and joint fit	Interior decorators, contractors and building-material shops
Ceiling roses and decorative panels	Approved pattern depth, dimensions, finish and installation points	Residential, hospitality and ceremonial interiors

Casting plaster must have stable setting time and fine surface quality. Mould release, water ratio, mixing, vibration and drying affect pinholes, warping and edge breakage. Acceptance checks dimensions, straightness, pattern fill, surface voids, moisture, handling strength, mould-cycle life, pieces per shift and a trial ceiling/wall installation. Fire claims require the named test.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Dry plaster store and bench weighing	Protects material and controls each recipe	Dust-contained manual entry
2	Two small high-speed mixers	Alternates repeat casting batches	Recipe-sized bowls
3	Silicone and FRP mould set	Forms 8-12 approved designs	Replaceable local tooling
4	Vibration/deaeration tables	Reduces trapped air and surface pinholes	Low-amplitude control
5	Casting benches and demoulding tools	Supports straight low-damage handling	Ergonomic working height
6	Level drying racks and air movement	Dries mouldings without bow or twist	Protected natural route
7	Trim/sanding extraction	Finishes joints while containing fine dust	Local exhaust
8	Inspection templates and padded packing	Controls fit and prevents transit damage	Design-coded packs

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 decorative gypsum mouldings workshop equipment.



Made-in-China supplier reference: second real machine configuration for decorative gypsum mouldings workshop.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Fine casting gypsum plaster with stable setting time
- Clean water and validated retarders or reinforcing fibre only where required
- Silicone, FRP, release agent and master-pattern materials
- Foam separators, cartons/crates, labels, sanding consumables and mixer spares

Utilities & infrastructure

- Single- or three-phase power according to mixer/extraction selection
- Dry humidity-controlled plaster and mould storage
- Level covered casting and rack-drying room
- Local exhaust for weighing, trimming and sanding
- Clean wash area with settled solids; no gypsum slurry to drains

Quality, safety and environmental controls

- Approve master pattern and mould before commercial casting
- Weigh plaster, water and additives for every batch
- Record mix, fill, vibration, set and demould times
- Inspect mould damage, pattern fill, voids and broken edges
- Check moisture, dimensions and straightness before packing
- Trial-fit each profile family and trace complaints to mould/batch

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-entry workshop uses manual mould casting, local labour and 8-12 saleable designs. A long automatic cornice conveyor, building, showroom and working stock are excluded.

Component	Indicative range	Notes
Mixing, weighing and casting benches	US\$4k-11k	Two-mixer manual cell
Starter moulds, vibration and drying racks	US\$5k-14k	8-12 design collection
Dust extraction, finishing and packing	US\$3k-8k	Clean workshop scope
Freight, installation, training and spares	US\$3k-9k	Local fixtures where suitable
Indicative installed low-entry total	US\$15k-42k	Building, plaster stock and automatic line 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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