

CNC-Carved Wood Moulds & Pattern Masters

Complete Turnkey Business Proposal



Made-in-China supplier reference: real cnc-carved wood moulds & pattern masters equipment.

target machine compatibility	released drawing design gate	trial sample acceptance	tool 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

Creates CNC-carved wood, MDF or resin-sealed pattern masters for foundry work, concrete/gypsum moulds, decorative panels and prototypes through drawing preparation, nesting, CNC routing, hand finishing, sealing, measurement and protected packing.

Why this project fits Afghanistan

- Tooling must be designed around the target production machine and released buyer drawing.
- First-off samples, measured dimensions and repeat-cycle evidence must be accepted before production release.
- Start with one high-demand product family and retain tool drawings, settings and maintenance records.

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

Launch with small to medium pattern masters from stable MDF or selected timber for one buyer segment. Confirm final casting/mould material, shrinkage allowance, draft, machining tolerance, split lines, inserts, surface finish, sealant and repeat-use expectation before routing.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
CNC wood moulds and pattern masters	Buyer drawing, material and stability grade, shrinkage/draft allowance, split lines, insert locations, surface finish, sealant and repeat-use requirement	Foundries, precast/gypsum workshops, decorative-product makers, furniture firms and prototype buyers

Supplier scope, dimensions, material grade, target-machine compatibility, sample acceptance, utilities and delivery must be confirmed before purchase.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	CAD/nesting station	Prepares routing and material layout	Allowance and grain/stability
2	CNC router	Carves pattern geometry	Working area and tolerance
3	Hand-finish bench	Refines details and assembly	Split/insert fit
4	Sealing/painting station	Protects the pattern surface	Moisture and release
5	Measurement/trial bench	Checks master against drawing	Dimensions and repeat use

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 cnc-carved wood moulds & pattern masters equipment.



Made-in-China supplier reference: second real machine configuration for cnc-carved wood moulds & pattern masters.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Stable hardwood/MDF/PU board, sealers, release coatings, inserts, fasteners, router cutters, abrasives, measuring tools and packing

Utilities & infrastructure

- Stable three-phase power, guarded machining, calibrated measuring tools, covered material/tool storage and safe lifting/handling
- Documented maintenance, critical wear spares, approved coolants/lubricants and product-specific safety controls

Quality, safety and environmental controls

- Account for shrinkage, draft and parting lines before CNC routing
- Control material stability, cutter marks, joints, insert locations, sealant coverage and final dimensions
- Trial the pattern with the intended mould or casting process; inspect release, surface transfer, moisture movement and repeat-use condition

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 CNC pattern master is low-entry only when the buyer accepts a controlled material and finish. It still needs correct draft, shrinkage allowance and sealing for the target process.

Component	Indicative range	Notes
CAD/CAM workstation and CNC router	US\$8k-30k	Small/medium work envelope
Dust extraction, finish bench and sealing	US\$4k-16k	Surface and operator safety
Gauges, cutters and first materials	US\$2k-9k	Pattern-specific setup
Indicative entry total	US\$14k-55k	Building, large 5-axis router and working 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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- https://www.made-in-china.com/products-search/hot-china-products/Mold_Edm_Machine.html