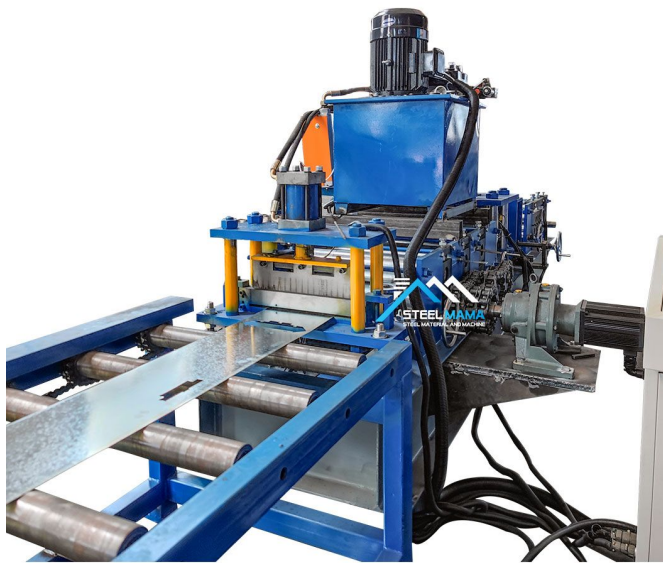


Aluminium Concrete Formwork Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real aluminium concrete formwork line equipment.

approved sample market gate	defined range launch scope	performance test release 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

Produces aluminium concrete-formwork systems through alloy profile/plate processing, CNC machining, panel assembly, welding or fastening, surface preparation, engineered connection control, trial assembly and structural validation.

Why this project fits Afghanistan

- Approve a physical sample and applicable standard.
- Launch with a defined product range and documented tool settings.
- Keep material and quality records for each batch.

Sanaatchi delivery scope

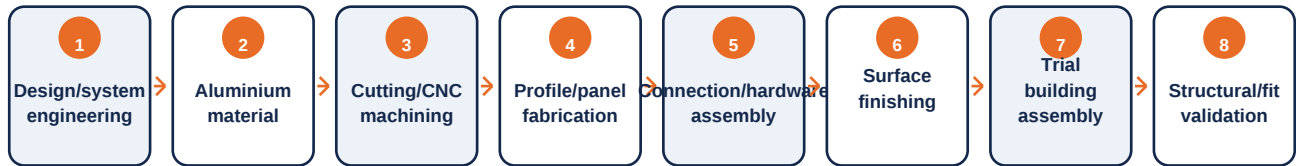
- Factory setup planning, supplier pre-qualification, and technical comparison
- Complete production-line and individual equipment supply
- Factory layout, utilities, civil-work coordination, installation, and commissioning
- Raw-material sourcing, trial-batch qualification, and repeat supply planning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

Recommended configuration

This is a strategic engineered-system project. Confirm building typology, repetition volume, structural design responsibility, alloy source, welding/heat-treatment requirements, quality system, contractor demand and bankable off-take before selecting EPC equipment.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Aluminium concrete formwork systems	Alloy/profile system, panel size, wall/slab/beam module, connection hardware, concrete pressure rating, surface finish, reuse cycle, lifting/handling and design certification	Large residential developments, high-rise contractors, infrastructure, repeat-housing and specialised formwork rental companies

Supplier scope, materials, utilities, installation requirements and acceptance criteria must be confirmed before purchase.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	CNC cutting/machining cells	Processes aluminium modules	System-hole accuracy
2	Panel/profile fabrication cell	Builds engineered panels	Alloy/joint control
3	Connection/hardware assembly	Completes modular system	Repeatable lock/tie fit
4	Surface/handling station	Protects reusable faces	Finish/handling safety
5	Full-system trial bay	Validates formwork kit	Assembly/structural checks

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 aluminium concrete formwork line equipment.



Made-in-China supplier reference: second real machine configuration for aluminium concrete formwork line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Specified aluminium alloy profiles/plate, engineered connectors and ties, welding/fastening consumables, surface-treatment materials, labels, packing and handling fixtures

Utilities & infrastructure

- Stable electricity, covered raw-material storage and protected finished-goods handling
- Guarded equipment, documented maintenance, essential spares and product-specific safety controls

Quality, safety and environmental controls

- Use a licensed/engineered design and validate complete wall/slab/beam systems before production
- Control alloy certificates, machining geometry, joint quality, module fit, surface finish and traceable hardware
- Verify concrete-pressure, repeat-assembly, lifting/handling and structural claims through qualified testing

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

Aluminium formwork is not a commodity panel. It needs engineered modules, dependable alloy/joint control and a committed high-volume contractor market.

Component	Indicative range	Notes
CNC, aluminium fabrication and assembly	US\$1.2m-4.5m	Engineered system production
Handling, trial bay, QC and utilities	US\$500k-2m	Structural validation scope
EPC engineering, commissioning and spares	US\$500k-2m	Design-led startup
Indicative strategic total	US\$2.2m-8.5m	Land, building, certification and aluminium 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

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Research and image references

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