



Rebar Rolling Mill

Complete Turnkey Business Proposal



Made-in-China supplier reference: real rebar rolling mill equipment.

10-25 t/hour billet-fed screen	2-3 diameters controlled launch	hot rolled process	70-140 three-shift workforce
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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 strategic rolling mill converting certified billets into one rebar range through billet inspection, reheating, roughing/intermediate/finishing stands, controlled cooling, shearing, bundling, marking and mechanical-property release. Scrap melting is excluded unless separately engineered as a steelmaking project.

Why this project fits Afghanistan

- Billet rolling can add local value when certified steel feedstock and construction demand are stable.
- Yield, weight tolerance and mechanical properties determine rebar acceptance.
- Hot rolling requires robust utilities, lifting, guarding and safety management.

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

Screen a billet-fed 10-25 t/hour mill and a narrow diameter range after validating billet certificates, gas/electricity, water cooling, rolls and guides, NDT/lab equipment, national standards and contracted construction demand.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Reinforcing steel bars	Diameter, mass per metre, rib geometry, yield strength, tensile strength, elongation and bend performance	Afghan contractors, steel traders and infrastructure projects

Selection requires a site-specific feasibility study, representative material trials and documented acceptance testing for this exact line.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Billet yard, furnace and descaler	Prepares certified billets	10-25 t/hour screen
2	Rolling stands, guides and finishing blocks	Reduces and ribs bar	Narrow diameter range
3	Cooling bed, shears and bundler	Cuts and packs straight bar	Standard trading lengths
4	Mechanical lab and traceability	Releases compliant rebar	Tensile/bend/mass tests

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 rebar rolling mill equipment.



Made-in-China supplier reference: second real machine configuration for rebar rolling mill.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Certified billets with defined chemistry and dimensions
- Rolls, guides, water-treatment chemicals, tags and bundles

Utilities & infrastructure

- Stable three-phase electricity with verified connected load
- Guarded machinery, lockout, ventilation and fire protection
- Covered segregated raw-material and finished-goods storage
- Maintenance tools, safe lifting and critical spare parts
- Reheating fuel/electricity, cooling-water loop, compressed air and heavy lifting
- Scale collection, hot-zone guarding, fume extraction and fire response

Quality, safety and environmental controls

- Verify billet certificate, chemistry and dimensions
- Record furnace temperature, rolling pass, cooling and length
- Test mass per metre, diameter, ribs, tensile/yield, elongation and bend/rebend

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 lower strategic screen is a billet-fed mill with limited diameters. Scrap melting or billet casting must be separately permitted, engineered and financed.

Component	Indicative range	Notes
Billet yard, reheating and rolling stands	US\$8m-20m	10-25 t/hour basis
Cooling, shear, bundling and laboratory	US\$3m-8m	Narrow diameter range
Utilities, civil, cranes and installation	US\$5m-12m	Hot-rolling infrastructure
Indicative strategic project total	US\$16m-40m	Land, billet stock 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

- <https://www.alibaba.com/showroom/rebar-rolling-mill.html>
- https://www.made-in-china.com/products-search/hot-china-products/Rebar_Rolling_Mill.html