



Glass-Bottle & Container Factory

Complete Turnkey Business Proposal



Made-in-China supplier reference: real glass-bottle & container factory equipment.

bankable study investment gate	confirmed feedstock supply gate	EPC scope delivery gate	quality laboratory release gate
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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

Strategic container-glass manufacturing that batches minerals and cullet, melts glass, forms bottles on IS machines, anneals, inspects, packs and supplies food, beverage and pharmaceutical packaging markets.

Why this project fits Afghanistan

- This is a strategic plant, not a low-entry equipment package.
- Bankable feedstock, utility, permit, market, EPC and financing evidence is required before selection.
- Operate only with an independent laboratory, defined quality release and preventive-maintenance program.

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

Proceed only after a bankable study confirms bottle demand, compatible customer filling lines, cullet/recycling route, batch chemistry, fuel, water, mould/tooling support, quality requirements, permit and experienced container-glass EPC/operations team.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Glass bottles and containers	Approved bottle/jar family, neck finish, volume, weight, colour, glass type, pressure/thermal resistance, defect limits and packing	Beverage, water, food, pharmaceutical, edible-oil and household-product bottlers

Final capacity, process, resource quality, utilities, permit conditions, emissions, acceptance test and commercial terms require independent engineering review before any order.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Batch/cullet preparation	Controls container glass recipe	Chemistry and cullet quality
2	Melting/refining furnace	Supplies stable gob glass	Temperature and fuel
3	IS forming machines and moulds	Forms bottle families	Neck, volume and cycle
4	Annealing/inspection line	Relieves stress and rejects defects	Strength and appearance
5	Packing/palletising/laboratory	Protects released containers	Customer filling compatibility

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 glass-bottle & container factory equipment.



Made-in-China supplier reference: second real machine configuration for glass-bottle & container factory.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Silica, soda ash, limestone/dolomite, cullet, colorants, mould components, lubricants, fuel, packaging, pallets and laboratory consumables

Utilities & infrastructure

- Bankable electricity/fuel/water plans, process cooling and treatment, plant fire safety, laboratory, covered stores and qualified operation team
- Environmental permits, emissions control, waste route, maintenance workshop, critical spares and site-specific safety systems

Quality, safety and environmental controls

- Confirm customer bottle drawings and filling-line requirements, cullet supply, fuel, permits, water, power and mould-maintenance capability before procurement
- Control batch, gob weight, mould condition, finish/neck dimensions, anneal, pressure/thermal performance, defects, inspection and pack quality
- Run customer filling trials; verify volume, weight, top load, pressure/thermal shock, dimensions, glass defects and line compatibility

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 bottle factory must be built around confirmed bottle families and filling customers. Bottle performance, mould support and furnace continuity are non-negotiable.

Component	Indicative range	Notes
Batch/cullet, furnace and forehearth	US\$80m-260m	Furnace pull and fuel dependent
IS forming, moulds, annealing and inspection	US\$45m-170m	Bottle portfolio scope
Utilities, laboratory, packing and installation	US\$30m-110m	Quality and logistics
Indicative strategic project total	US\$155m-540m	Land, finance, bottle tooling 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/glass-manufacturing-line.html>
- https://www.made-in-china.com/products-search/hot-china-products/Glass_Production_Line.html