



Plastic Bottles Line

Complete Turnkey Business Proposal



Complete production-line reference for Plastic Bottles Line

1 shift entry operation	2-5 core operators	Low-cost Chinese line
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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

This proposal presents a practical low-entry plastic bottles line for Afghanistan. Blow moulding, leak testing and packaging PET and HDPE bottles. The starting configuration prioritizes economical Chinese machinery, local fabrication of noncritical items, affordable local labor, simple buildings and phased automation.

Why this project fits Afghanistan

- Local production can replace selected imported finished goods.
- Affordable land, labor and local fabrication reduce the entry threshold.
- A one-shift starting model limits working-capital pressure.
- Modular equipment allows capacity to grow with confirmed sales.

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

Start with one semi-automatic shift and the minimum core equipment needed for plastic bottles line; add automatic handling and higher-speed packing after demand is proven.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Water bottles	Confirm size, grade, formulation and pack specification for water bottles	Afghanistan and nearby regional buyers
Beverage bottles	Confirm size, grade, formulation and pack specification for beverage bottles	Afghanistan and nearby regional buyers
Edible-oil bottles	Confirm size, grade, formulation and pack specification for edible-oil bottles	Afghanistan and nearby regional buyers
Household-chemical bottles	Confirm size, grade, formulation and pack specification for household-chemical bottles	Afghanistan and nearby regional buyers

The proposed flow is derived from the website product scope: Blow moulding, leak testing and packaging PET and HDPE bottles. Final machine models, recipes, output and quality standards must be confirmed against local raw materials and buyer requirements.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Raw-material unwinder or feeder	Receives, buffers or feeds the plastic bottles input at a controlled rate.	State input form, feed rate, storage volume and contact material.
2	Heating or extrusion unit	Performs the principal forming operation that creates the plastic bottles product or web.	Confirm working width or mould, output, speed, tooling and quality tolerance.
3	Forming or molding machine	Performs the principal forming operation that creates the plastic bottles product or web.	Confirm working width or mould, output, speed, tooling and quality tolerance.
4	Trim collection system	Performs the defined trim collection system operation within the plastic bottles process.	Confirm capacity, working range, utilities, construction material, controls and acceptance test.
5	Counting and stacking unit	Performs the defined counting and stacking unit operation within the plastic bottles process.	Confirm capacity, working range, utilities, construction material, controls and acceptance test.
6	Inspection conveyor	Checks incoming material or finished plastic bottles against the agreed acceptance criteria.	Define defect limits, test method, sampling rate and reject arrangement.
7	Bagging machine	Measures, closes, identifies or groups finished plastic bottles for sale and transport.	State pack sizes, packaging material, speed, coding and change-parts required.
8	Carton sealer	Measures, closes, identifies or groups finished plastic bottles for sale and transport.	State pack sizes, packaging material, speed, coding and change-parts required.
9	Air compressor	Provides the controls or auxiliary service needed for safe, stable plastic bottles operation.	Confirm utility load, control interfaces, environmental duty and redundancy need.
10	Scrap grinder	Reduces or prepares material to the size required by the next plastic bottles stage.	State feed size, finished size, throughput, blade or wear-part material.

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



Complete production-line reference for Plastic Bottles Line



Real supplier equipment reference for Plastic Bottles Line



Real supplier equipment reference for Plastic Bottles Line

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Food-grade polymer, paper or approved substrate
- Printing inks or masterbatch
- Bags, cartons and labels
- Process consumables
- Spare tooling and cutting blades

Utilities & infrastructure

- Three-phase power
- Compressed air
- Cooling water where required
- Clean dry production room
- Finished-goods warehouse
- Ventilation and scrap handling

Quality, safety and environmental controls

- Incoming-material inspection and supplier records
- Documented machine settings and production batches
- Routine dimensional, visual and functional checks
- Safe guarding, emergency stops and operator training
- Final product sampling before release and dispatch

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

Afghanistan entry case: economical Chinese equipment, locally fabricated noncritical items, local civil works and labor, phased automation, and land excluded. Optional automation can be added after sales are established.

Component	Indicative range	Notes
Entry machinery	US\$35k-140k	Economy configuration using local labor where practical
Local utilities and workshop	US\$12k-45k	Economy configuration using local labor where practical
Tooling and packing	US\$10k-35k	Economy configuration using local labor where practical
Freight and installation	US\$12k-45k	Economy configuration using local labor where practical
Working capital	US\$8k-30k	Economy configuration using local labor where practical
Low-entry project total	US\$77k-295k	Economy configuration using local labor where practical

Implementation sequence

Phase 1	2-3 weeks	Confirm products, entry capacity and buyer requirements
Phase 2	3-5 weeks	Compare suppliers and finalize the economy configuration
Phase 3	6-12 weeks	Manufacture equipment and prepare the local workshop
Phase 4	3-6 weeks	Shipping and customs clearance
Phase 5	2-4 weeks	Installation, training, trials and market launch

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

- Real production-line image reference: <https://image.made-in-china.com/2f0j00nTBqukezbygU/Plastic-Bottle-Injection-Molding-Line.jpg>
- Real production-line image reference: https://cms-usa-west-file.oss-us-west-1.aliyuncs.com/38/38_1748504119373.jpg
- Real production-line image reference:
<https://image.made-in-china.com/2f0j00WVdkpPSUZrob/0-2L-to-20L-Pet-Bottle-Drinking-Water-Blow-Molding-Blowing-Production-Line.jpg>