

Cup Yogurt Production Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real compact batch yogurt processing line with sanitary tanks.

200-500 L/batch starter yogurt batch	1 launch yogurt style	1 launch cup size	8-12 entry operators
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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 chilled cultured-dairy line for receiving released milk, standardizing the recipe, pasteurizing the yogurt mix, optional homogenization, cooling to inoculation temperature, culture dosing, fermentation as set yogurt in sealed cups or as stirred yogurt in a tank, rapid chilling, coding and refrigerated distribution. The set-yogurt and stirred-yogurt routes require different filling timing and handling.

Why this project fits Afghanistan

- Afghan milk can be converted into a familiar high-turnover refrigerated food.
- Cup packs support neighborhood retail, schools and hospitality.
- Batch production limits entry capital and allows careful culture control.
- Plain yogurt avoids fruit-preparation complexity at launch.

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

For the lowest credible entry, use 200-500 L batch pasteurizing/fermentation tanks, a small sanitary transfer pump, semi-automatic premade-cup filler and foil sealer, incubation racks or room, basic two-tank CIP and cold room. Launch one plain yogurt, one cup size and either the set or stirred process-not both until validated.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Plain set yogurt	Filled before incubation, intact gel, declared composition and refrigerated shelf life	Retail cups and institutional meals
Plain stirred yogurt	Tank-fermented, gently stirred, filled cold and protected from whey separation	Retail cups and food service

Set yogurt is filled before incubation; stirred yogurt is fermented in a tank and filled after controlled agitation and cooling. Acceptance must validate milk release, heat treatment, inoculation hygiene, pH/acidity endpoint, texture, syneresis, cup seal, microbiology and actual cold-chain shelf life.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Milk receiving and balance tank	Receives only released chilled milk	200-500 L insulated entry
2	Batch pasteurizing/fermentation tank	Heats, holds, cools and ferments the yogurt mix	Recorded time, temperature and agitation
3	Optional homogenizer	Improves body and limits cream separation	Only after product trials
4	Culture dosing station	Adds starter hygienically at controlled temperature	Calibrated small-batch dosing
5	Premade-cup filler and foil sealer	Fills and hermetically seals one cup format	Semi-automatic entry
6	Incubation racks or room	Maintains set-yogurt fermentation temperature	Required for set-in-cup route
7	Two-tank CIP set	Cleans tanks, pipes and filler	Validated detergent cycle
8	Cold room and crates	Rapidly chills and holds finished cups	Buyer-defined cold chain

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 compact batch yogurt processing line with sanitary tanks.



Made-in-China supplier reference: real yogurt pasteurizing and fermentation tanks representative of a small cup-yogurt plant.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Released chilled Afghan cow or goat milk by separate product
- Approved yogurt starter culture and declared recipe ingredients
- Food-contact premade cups, foil lids, labels and cartons
- Approved dairy detergents and test reagents

Utilities & infrastructure

- Stable electricity matched to motors, controls and refrigeration
- Potable process and cleaning water
- Washable food-grade rooms with drainage and pest control
- Segregated raw-milk, ingredients, packaging and finished-goods areas
- Steam or hot water, chilled water and compressed air only where specified

Quality, safety and environmental controls

- Test incoming milk under the approved acceptance plan
- Record heat-treatment and cooling curve for every batch
- Control culture storage, dosage and inoculation hygiene
- Measure pH/acidity endpoint, texture and whey separation
- Test cup fill, seal strength, leakage and code
- Release microbiology and shelf life under actual cold chain

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

Lowest entry makes one plain yogurt in one cup size with batch tanks and semi-automatic sealing. Fruit preparation, multiple cup formats, automatic cartoning, building, refrigerated vehicle and working stock are excluded.

Component	Indicative range	Notes
Receiving and batch process tanks	US\$8k-20k	200-500 L/batch
Cup filling and sealing	US\$4k-11k	One premade cup size
Incubation, CIP and quality tools	US\$5k-13k	One yogurt style
Cold room and crates	US\$4k-10k	Short local route
Freight, installation and spares	US\$5k-12k	Sanitary commissioning
Indicative low-entry total	US\$26k-66k	Building, vehicle, milk and packaging stock excluded

Implementation sequence

Phase 1	2-3 weeks	Confirm milk quality, product specification, capacity, packs and cold route
Phase 2	2-4 weeks	Run representative Afghan milk, culture, ingredient and packaging trials
Phase 3	5-9 weeks	Manufacture, inspect and ship approved equipment
Phase 4	3-5 weeks	Install, train and validate hygiene, process and product release controls

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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