

Paper Egg-Tray Production Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real paper egg-tray production line equipment.

1,000 trays/h starter former	~80 kg/h screened paper input	30 eggs launch mould	6-10 entry 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 small/medium moulded-fibre line converting sorted local wastepaper into 30-egg trays through wastepaper receiving, contaminant removal, hydropulping, screening, refining and consistency control, recycled-water chest mixing, vacuum forming on dedicated moulds, compressed-air transfer, controlled drying, hot pressing only if required, nesting, counting, compression and moisture testing, strapping and dry storage. Water is recirculated and dirty reject streams require treatment.

Why this project fits Afghanistan

- Local wastepaper becomes a needed poultry-packaging product.
- One common 30-egg format simplifies moulds, stacking and customer trials.
- Water recirculation reduces demand and fibre loss.
- Drying capacity, tray moisture and compression-not former speed alone-set saleable output.

Sanaatchi delivery scope

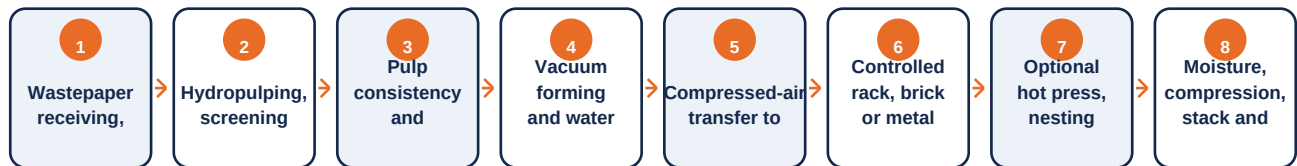
- Factory setup planning, supplier pre-qualification, and technical comparison
- Complete production-line and individual equipment supply
- Factory layout, utilities, civil-work coordination, installation, and commissioning
- Raw-material sourcing, trial-batch qualification, and repeat supply planning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

Recommended configuration

Begin with one 30-egg tray and confirmed poultry buyers. Screen a 1,000 tray/h reciprocating or small rotary former consuming about 80 kg/h paper, with hydropulper, screen, mixing chests, pumps, vacuum/air systems and mould set. Use sun/covered-rack drying only after seasonal trials prove capacity and hygiene; otherwise install a fuel-efficient metal or brick dryer sized to the wet output.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Thirty-egg moulded-pulp tray	Buyer-approved dimensions, pocket fit, dry mass, moisture, compression, drop and nesting	Poultry farms, egg graders and wholesalers
Alternative produce tray	Separate mould, fibre recipe, drying and load validation	Fruit packers only after egg-tray demand is stable

Wastepaper furnish changes drainage, strength, colour and contamination. Acceptance uses representative local paper and measures rejects, pulper time, consistency, forming cycle, wet mass, vacuum, drying time/energy, final moisture, tray mass, dimensions, egg fit, stacking compression, drop loss, nesting and fibre/water yield. Sunshine drying cannot support year-round contracts without weather capacity evidence.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Sorting conveyor and hydropulper	Removes debris and disintegrates wastepaper	About 80 kg/h paper basis
2	Screen, refiner and pulp chests	Cleans and controls furnish consistency	Closed water loop
3	Pumps, vacuum and air systems	Forms and transfers wet trays	Duty matched to former
4	1,000 tray/h forming machine	Vacuum moulds one tray geometry	One 30-egg mould set
5	Rack, brick or metal dryer	Removes water to storage moisture	Season and fuel sized
6	Optional hot press and stacker	Improves nesting and appearance	Only if buyer requires
7	Tray laboratory and strapper	Tests and bundles dry trays	Moisture/compression control

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 paper egg-tray production line equipment.



Made-in-China supplier reference: second real machine configuration for paper egg-tray production line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Sorted local wastepaper with controlled plastic, metal and sand
- Clean process makeup water and approved strength/sizing aids
- Drying fuel where forced drying is installed
- Straps, pallets, wrap, labels, mould mesh and pump/vacuum spares

Utilities & infrastructure

- Three-phase power, vacuum and compressed air
- Reliable water with settling and high-recycle process loop
- Covered dirty-paper and clean dry-product zones
- Drying yard or insulated dryer with safe fuel system
- Reject, sludge, drainage, odour and fire-control plan

Quality, safety and environmental controls

- Sort and record every wastepaper batch
- Control pulp consistency and additive dosage
- Check mould vacuum, wet weight and transfer
- Verify drying temperature/time and final moisture
- Test tray dimensions, mass, compression and egg fit
- Trace every bundle and monitor fibre/water yield

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 lowest credible plant uses one 30-egg mould, local pulping tanks and covered rack drying where seasonal trials prove it. Automatic metal drying, hot pressing, building and wastepaper stock are excluded.

Component	Indicative range	Notes
Pulping, screening, chests and pumps	US\$8k-20k	1,000 trays/h furnish system
Former, vacuum, air and one mould	US\$12k-30k	Small reciprocating/rotary entry
Rack/compact dryer, laboratory and packing	US\$8k-24k	Climate and fuel dependent
Water loop, freight, installation and spares	US\$8k-22k	Local tanks/civil works
Indicative installed low-entry total	US\$36k-96k	Large metal dryer, building and paper stock 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://efficient-machinery.en.made-in-china.com/product/KRSUMznvEbWX/China-Small-Profitable-Waste-Paper-Recycle-Machine-with-Drying-Line-Auto-matic-Egg-Tray-Pulp-Molding-Machine.html>

- <https://haiyangmachine.en.made-in-china.com/product/kKnEdDqyMOUs/China-Paper-Pulp-Egg-Carton-Waste-Paper-Pulp-Fiber-Egg-Tray-Making-Machine.html>