SANAATCHI
INDUSTRIAL VISION GROUP

Tomato Powder Production Line

Complete Turnkey Business Proposal

Chase Industrial

FOCUS ON FOOD PROCESSING MACHINERY SINCE 2008

Supplier reference: real hygienic tomato processing equipment representative of washing, pulping and concentration.

300-500 kg/h **starter fresh-tomato input**	**28-32 °Brix** **indicative pre-dryer concentrate**	**3-5%** **typical final moisture target**	**7-11** **entry operators**

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 line makes stable tomato powder from sound ripe tomatoes through washing, crushing and pulping, concentration, thin-layer drying, milling and packing. Tomato color and flavor are heat-sensitive, so the entry plant must validate puree thickness, dryer temperature, residence time and final water activity rather than simply reuse tomato-paste settings.

Why this project fits Afghanistan

- Tomato powder preserves seasonal surplus and reduces transport and storage weight.
- Powder supplies soup, seasoning, snack and sauce manufacturers with concentrated tomato solids.
- A puree-based route gives more uniform powder than uncontrolled drying of thick tomato pieces.
- A compact batch or small continuous dryer can scale after buyer trials.

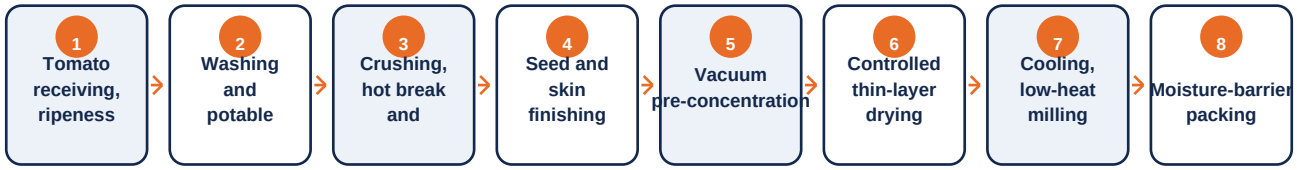
Sanaatchi delivery scope

- 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, select a 300-500 kg/h tomato intake with washer, crusher-pulper, finisher, small vacuum concentrator, drum or vacuum-belt dryer sized by trials, low-heat mill, sieve and semi-automatic powder packer.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Tomato powder	Buyer-approved color, mesh, moisture, acidity and microbiology	Seasoning, soup, snack and sauce processors
Tomato granules	Coarser released fraction with controlled moisture	Instant-food and ingredient buyers

Powder yield depends on tomato solids, concentration level and dryer losses. Drum drying is economical but can produce more cooked flavor; vacuum-belt or low-temperature alternatives cost more. Supplier acceptance must include powder trials with Afghan tomatoes.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Tomato washer and sorting conveyor	Cleans fruit and removes defects	300-500 kg/h intake
2	Crusher and hot-break unit	Creates mash and controls enzymes	Recorded time-temperature treatment
3	Pulper-finisher	Separates puree from skins and seeds	Interchangeable food-grade screens
4	Vacuum concentrator	Raises solids before drying	Small batch or continuous effect
5	Drum or vacuum-belt dryer	Converts concentrate into dry sheet or flakes	Selected through product trials
6	Cooling and flake breaker	Prevents condensation and prepares feed	Dry filtered air
7	Low-heat mill and sieve	Produces controlled powder mesh	Dust-controlled closed transfer
8	Powder weigher and sealer	Packs released powder	High-barrier pouch or liner

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

Supplier reference: real hygienic tomato processing equipment representative of washing, pulping and concentration.

Supplier reference: real low-temperature vacuum drying equipment illustrating the controlled dehydration stage.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Sound ripe Afghan tomatoes
- Potable process water
- Only buyer-approved processing aids
- High-barrier pouches or bulk liners
- Labels and cartons

Utilities & infrastructure

- Stable three-phase electricity
- Potable process water and hygienic drainage
- Food-grade heat source where required
- Ventilated washable processing room
- Clean dry packing and finished-goods storage

Quality, safety and environmental controls

- Control variety, ripeness, mold and pesticide compliance
- Record puree yield, Brix, pH and acidity
- Validate hot-break and concentration settings
- Control dryer surface temperature and residence time
- Verify color, moisture, water activity, mesh and microbiology
- Protect powder from humidity, oxidation and metal contamination

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 credible entry uses one small dryer and semi-automatic high-barrier packing. Spray drying, aseptic concentrate storage, automatic retail packing, building and tomato inventory are excluded.

Component	Indicative range	Notes
Washing, crushing and pulping	US$12k-26k	300-500 kg/h intake
Vacuum pre-concentration	US$12k-28k	Small product-contact system
Entry drying system	US$22k-55k	Trial-selected technology
Milling, packing and QC tools	US$7k-16k	One powder format
Freight, installation and spares	US$8k-20k	Dryer footprint and heat source matter
Indicative low-entry total	US$61k-145k	Building, tomato and working capital excluded

Implementation sequence

Phase 1	2-3 weeks	Confirm raw material, product, capacity and pack specifications
Phase 2	2-4 weeks	Run supplier trials with representative Afghan material
Phase 3	6-10 weeks	Manufacture, inspect and ship the selected equipment
Phase 4	3-5 weeks	Install, train, validate the process and start shelf-life checks

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.made-in-china.com/products-search/hot-china-products/Tomato_Powder_Production_Line.html
- https://www.made-in-china.com/products-search/hot-china-products/Fruit_Drying_Line.html