SANAATCHI
INDUSTRIAL VISION GROUP

Sheep & Goat Abattoir and Chilling Line

Complete Turnkey Business Proposal

Made-in-China supplier reference: real sheep/goat slaughter rail and processing system.

10-20 head/h	**2-stage**	**100%**	**25-45**
entry design throughput	**carcass chilling approach**	**ante/post-mortem inspection**	**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

A medium industrial small-ruminant abattoir covering animal receiving and holding, ante-mortem inspection, approved halal slaughter and bleeding, hide removal, head/feet and viscera handling, carcass splitting where required, post-mortem inspection, washing, weighing, rapid carcass chilling, edible offal chilling and controlled dispatch.

Why this project fits Afghanistan

- Afghan livestock or poultry can support formal hygienic meat markets.
- Rapid chilling protects product quality and extends usable distribution time.
- A phased semi-automatic line uses local labor while controlling critical hygiene steps.
- By-products and wastewater need confirmed legal, safe and economical routes.

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	Obtain a complete installed-cost proposal for a 10-20 head/h rail-based line, including lairage, halal slaughter box/station, bleeding rail, hide puller or hygienic manual skinning platforms, evisceration and inspection stations, carcass washer, scales, two-stage chill rooms, offal room, wastewater and condemned-material systems.

Manufacturing Process & Product Portfolio

Integrated process flow

Target products

Product	Typical specification	Primary market
Chilled sheep carcass	Inspected, identified, weighed and chilled under the approved time-temperature program	Wholesalers, butchers and institutions
Chilled goat carcass and edible offal	Separate species/lot identity; offal cleaned, packed and chilled independently	Wholesale and specialist retail

Abattoir design is a licensed public-health project, not only an equipment purchase. It requires veterinary inspection, halal governance, animal welfare, clean/dirty zoning, potable water, sterilizers, cold rooms, wastewater treatment, blood/by-product control and a condemned-material route. Installed cost must follow a site and mass balance.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Lairage, race and restraint/slaughter station	Controls welfare, identity and approved halal slaughter	10-20 head/h design
2	Bleeding and dressing rail	Moves carcasses without floor contact	Species-appropriate spacing
3	Hide removal platforms or puller	Removes hide while limiting contamination	Manual/mechanical after study
4	Evisceration and inspection stations	Separates edible offal and supports inspection	Sterilizers and handwash included
5	Carcass washer, scale and rail ID	Cleans, weighs and preserves traceability	Post-inspection only
6	Pull-down and holding chill rooms	Achieves and maintains target carcass temperature	Maximum daily kill basis
7	Offal room and cold store	Separately cleans and chills approved offal	Red/green offal segregation
8	Wastewater and condemned-material system	Controls high-load effluent and unsafe material	Authority-approved route

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 sheep/goat slaughter rail and processing system.

Made-in-China supplier reference: real small-ruminant carcass dressing station on an installed line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Healthy animals or chilled carcasses from approved traceable suppliers
- Potable process water, ice or refrigeration as specified
- Food-contact bags, labels, cartons and clean reusable crates
- Approved cleaners, sanitizers and laboratory consumables

Utilities & infrastructure

- Stable electricity matched to motors, controls, refrigeration and lighting
- Potable process and sanitation water with adequate pressure
- Washable food-grade rooms, drainage, pest control and hygiene barriers
- Segregated live/dirty, edible-process, packaging and finished-product zones
- Cold rooms, wastewater and by-product systems sized to the confirmed process

Quality, safety and environmental controls

- Verify animal or carcass identity, health documents and acceptance criteria
- Separate dirty and edible zones with controlled staff and material flow
- Record process times, temperatures and sanitation checks
- Prevent fecal, hide/feather, equipment and employee cross-contamination
- Verify chilling curve, cold-room temperature and product microbiology
- Maintain by-product, condemned-material, wastewater and traceability records

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 uses a defined product scope, local labor for noncritical operations and purchased packaging. Building, land, livestock/meat working stock and distribution vehicles are excluded.

Component	Indicative range	Notes
Feasibility, design and approvals	US$20k-70k	Site, veterinary, halal and environmental basis
Slaughter, rail and dressing equipment	US$90k-300k	10-20 head/h installed screening
Cold rooms, offal and dispatch systems	US$80k-260k	Two-stage chilling
Water, wastewater and by-product systems	US$60k-240k	Mandatory site-specific scope
Civil works, installation and contingency	US$100k-380k	Food-grade building and specialist erection
Indicative installed project basis	US$350k-1.25m	Land, livestock and vehicles excluded

Implementation sequence

Phase 1	3-5 weeks	Confirm supply, products, capacity, site, permits and buyer standards
Phase 2	3-6 weeks	Complete process, hygiene, cold-chain and packaging trials
Phase 3	6-12 weeks	Manufacture, inspect and ship the approved equipment scope
Phase 4	4-8 weeks	Install, train, validate sanitation and pass performance 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

Sanaatchi Industrial Vision Group
Afghanistan Office: +93 779 819 820 | info@sanaatchi.com
China Office: +86 159 5171 6867 | china@sanaatchi.com
Website: www.sanaatchi.com

Research and image references

- https://qdempire.en.made-in-china.com/product/NwZTpQyrrsYh/China-10-50-Heads-Per-Hour-Professional-Goat-Slaughter-Processing-Conveyor-System-Abattoir-Machine.html
- https://zhenbanggd.en.made-in-china.com/product/OtEpPZkoAhVb/China-Poultry-Abattoir-Equipment-Halal-Killing-Box-Goat-Slaughter-Sheep-Slaughter-House-Knife-Equipment.html