

Small Leather-Tanning Line

Complete Turnkey Business Proposal



Alibaba supplier reference: real wooden process drum used in hide soaking, tanning and dyeing.

2-3 t/day screened salted-hide input	1 launch crust specification	2 drums minimum flexible process core	25-40 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 medium-industrial wet-process tannery converting properly preserved sheep and goat hides into crust or finished leather through sorting, soaking, liming and unhairing, fleshing, deliming and bating, pickling, buyer-approved tanning, sammying, splitting or shaving as required, neutralisation, retanning, dyeing, fatliquoring, drying and conditioning. It is a chemical and wastewater project, not merely a tanning-drum purchase.

Why this project fits Afghanistan

- Afghan sheep and goat hides can support higher-value leather if preservation improves.
- Crust leather can reduce finishing complexity at the first stage.
- A common tannery can serve several slaughter and hide-collection networks.
- Environmental compliance is essential for continuity and buyer acceptance.

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

Before buying machinery, complete a tannery feasibility and environmental design proving 2-3 t/day salted sheep/goat-hide supply, one crust-leather buyer specification, chemical recipe, water balance, sulfide/chromium route, sludge disposal and effluent-treatment performance. Screen two process drums, one flesher, small sammying/shaving equipment, drying frames and a full segregated wastewater plant.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Sheep/goat crust leather	Buyer-defined substance, area, shrinkage, colour, grain and chemical limits	Leather finishers and goods manufacturers
Finished lining or upper leather expansion	Dedicated finishing recipe and physical-performance tests	Footwear and bag makers after Phase 1

Chrome tanning, chrome-free tanning and vegetable tanning are not interchangeable labels. Each needs a complete chemical recipe, material balance and wastewater route. Sulfide, chromium, salt, COD, sludge and odour controls must be designed by an experienced tannery/environmental engineer and licensed locally.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Soaking/liming process drum	Rehydrates, cleans and opens preserved hides	2-3 t/day basis
2	Hydraulic fleshing machine	Removes residual flesh and fat	Sheep/goat working width
3	Pickle/tanning drum	Applies controlled tanning chemistry	Recipe and float monitored
4	Sammying and setting machine	Removes water and opens leather area	Buyer thickness route
5	Shaving or splitting machine	Controls leather substance	Optional after product trial
6	Retan/dye/fatliquor drum	Builds feel, colour and performance	Separate controlled recipes
7	Drying and conditioning system	Dries without damaging grain or area	Toggle/frame entry option
8	Segregated effluent-treatment plant	Treats sulfide, chromium/salt and organic loads	Designed from measured streams

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



Alibaba supplier reference: real wooden process drum used in hide soaking, tanning and dyeing.



Made-in-China supplier reference: real through-feed leather sammying machine.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Buyer-approved salted sheep and goat hides by documented grade
- Tannery chemicals with SDS, certificates and controlled storage
- Clean process water, test reagents and protective equipment
- Pallets, wrapping and labels for identified crust lots

Utilities & infrastructure

- Stable electricity matched to motors, controls, lighting and ventilation
- Process and sanitation water of the required quality and pressure
- Safe material storage, fire protection and worker hygiene facilities
- Dust, vapour or wastewater collection sized to the selected process
- Covered raw-material and finished-product storage with traceability

Quality, safety and environmental controls

- Grade incoming cure, hair slip, knife cuts and contamination
- Record every drum load, float, chemical dose, pH, time and temperature
- Measure thickness, area yield, shrinkage, tear/tensile and colour
- Test restricted substances to buyer and destination requirements
- Segregate sulfide and chromium-bearing streams where applicable
- Monitor effluent, sludge, chemical inventory and worker exposure

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 project launches one sheep/goat crust-leather specification and simple frame drying. Finished-leather coating, footwear equipment, land, hide inventory and working chemicals are excluded; effluent treatment is not optional.

Component	Indicative range	Notes
Feasibility, recipes and environmental design	US\$25k-80k	Buyer and site-specific prerequisite
Drums, fleshing and wet-end machines	US\$120k-360k	2-3 t/day screening basis
Drying, conditioning and laboratory	US\$60k-190k	One crust product
Effluent, chemical and safety systems	US\$100k-350k	Mandatory measured-stream design
Civil works, installation and contingency	US\$100k-320k	Corrosion-resistant wet building
Indicative installed project total	US\$405k-1.30m	Land, hides and working chemicals excluded

Implementation sequence

Phase 1	3-5 weeks	Confirm raw material, product, capacity, site, permits and buyer specification
Phase 2	3-6 weeks	Complete representative material, process, yield and quality trials
Phase 3	6-12 weeks	Manufacture, inspect and ship the approved equipment scope
Phase 4	4-8 weeks	Install, train, validate controls 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

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Research and image references

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