



Carpet Weaving Line

Complete Turnkey Business Proposal



Real supplier equipment reference for Carpet Weaving Line

1 shift entry operation	Local labor cost advantage	Phased machine additions
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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

This proposal presents a practical low-entry carpet weaving line for Afghanistan. Power looms, finishing and cutting solutions for machine-made and semi-handmade carpets. The starting configuration prioritizes economical Chinese machinery, local fabrication of noncritical items, affordable local labor, simple buildings and phased automation.

Why this project fits Afghanistan

- Local production can replace selected imported finished goods.
- Affordable land, labor and local fabrication reduce the entry threshold.
- A one-shift starting model limits working-capital pressure.
- Modular equipment allows capacity to grow with confirmed sales.

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

Start with one semi-automatic shift and the minimum core equipment needed for carpet weaving line; add automatic handling and higher-speed packing after demand is proven.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Machine-woven carpet	Confirm size, grade, formulation and pack specification for machine-woven carpet	Afghanistan and nearby regional buyers
Prayer rugs	Confirm size, grade, formulation and pack specification for prayer rugs	Afghanistan and nearby regional buyers
Carpet runners	Confirm size, grade, formulation and pack specification for carpet runners	Afghanistan and nearby regional buyers
Custom-pattern contract carpet	Confirm size, grade, formulation and pack specification for custom-pattern contract carpet	Afghanistan and nearby regional buyers

The proposed flow is derived from the website product scope: Power looms, finishing and cutting solutions for machine-made and semi-handmade carpets. Final machine models, recipes, output and quality standards must be confirmed against local raw materials and buyer requirements.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Yarn creel	Receives, buffers or feeds the carpet weaving input at a controlled rate.	State input form, feed rate, storage volume and contact material.
2	Warping machine	Performs the defined warping machine operation within the carpet weaving process.	Confirm capacity, working range, utilities, construction material, controls and acceptance test.
3	Carpet weaving or tufting loom	Performs the principal forming operation that creates the carpet weaving product or web.	Confirm working width or mould, output, speed, tooling and quality tolerance.
4	Backing adhesive applicator	Performs the defined backing adhesive applicator operation within the carpet weaving process.	Confirm capacity, working range, utilities, construction material, controls and acceptance test.
5	Drying and heat-setting oven	Applies the controlled thermal treatment required for stable carpet weaving quality.	Confirm temperature range, residence time, heat source, capacity and insulation.
6	Carpet shearing machine	Performs the defined carpet shearing machine operation within the carpet weaving process.	Confirm capacity, working range, utilities, construction material, controls and acceptance test.
7	Edge-binding station	Finishes, assembles or collects the carpet weaving product to its specified final form.	State finished dimensions, speed, tooling, tension or pressure and changeover needs.
8	Inspection table	Checks incoming material or finished carpet weaving against the agreed acceptance criteria.	Define defect limits, test method, sampling rate and reject arrangement.
9	Roll-up machine	Performs the defined roll-up machine operation within the carpet weaving process.	Confirm capacity, working range, utilities, construction material, controls and acceptance test.
10	Packing station	Measures, closes, identifies or groups finished carpet weaving for sale and transport.	State pack sizes, packaging material, speed, coding and change-parts required.

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



Real supplier equipment reference for Carpet Weaving Line



Real supplier equipment reference for Carpet Weaving Line



Real supplier equipment reference for Carpet Weaving Line

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Main textile or yarn input
- Thread, backing and accessories
- Labels and trims
- Packaging bags and cartons
- Machine needles, blades and consumables

Utilities & infrastructure

- Three-phase and single-phase power
- Bright production lighting
- Ventilation and dust control
- Compressed air where required
- Material racks and finished-goods storage
- Fire protection and clear evacuation routes

Quality, safety and environmental controls

- Incoming-material inspection and supplier records
- Documented machine settings and production batches
- Routine dimensional, visual and functional checks
- Safe guarding, emergency stops and operator training
- Final product sampling before release and dispatch

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

Afghanistan entry case: economical Chinese equipment, locally fabricated noncritical items, local civil works and labor, phased automation, and land excluded. Optional automation can be added after sales are established.

Component	Indicative range	Notes
Entry machinery	US\$25k-120k	Economy configuration using local labor where practical
Local workshop and utilities	US\$10k-40k	Economy configuration using local labor where practical
Tools and quality equipment	US\$5k-20k	Economy configuration using local labor where practical
Freight and training	US\$8k-30k	Economy configuration using local labor where practical
Working capital	US\$10k-40k	Economy configuration using local labor where practical
Low-entry project total	US\$58k-250k	Economy configuration using local labor where practical

Implementation sequence

Phase 1	2-3 weeks	Confirm products, entry capacity and buyer requirements
Phase 2	3-5 weeks	Compare suppliers and finalize the economy configuration
Phase 3	6-12 weeks	Manufacture equipment and prepare the local workshop
Phase 4	3-6 weeks	Shipping and customs clearance
Phase 5	2-4 weeks	Installation, training, trials and market launch

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

- Made-in-China supplier image reference: <https://image.made-in-china.com/2f0j00Epc0YuJrUzW/Jacquard-Carpet-Weaving-Machine-Oven-Production-Line-Spunbond-Non-Woven-Fabric-Machine-Comforter-Production-Line.jpg>

- Made-in-China supplier image reference:
<https://image.made-in-china.com/2f0j00mgYqRnNtEURB/Nonwoven-Machine-Needle-Punching-Carpet-Production-Line-for-Making-Fabrics.jpg>

- Made-in-China supplier image reference:
<https://image.made-in-china.com/2f0j00areczpVUofgT/Air-Laid-Formed-Felt-Non-Woven-Needle-Punching-Machine-Production-Line.jpg>