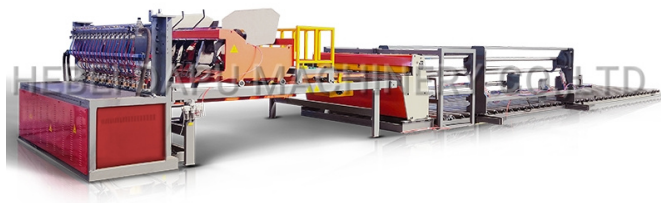


Welded-Wire Mesh Production Line

Complete Turnkey Business Proposal

DAPU 达普



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Made-in-China supplier reference: real welded-wire mesh production line equipment.

60-100 strokes/min screened entry speed	1.8-2.5 mm light roll wire	50 x 50 mm launch aperture	5-9 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 resistance-welding line converting straightened low-carbon or galvanized wire into light construction, fencing or cage mesh in rolls or panels through wire receiving, line-wire payoff/straightening, cross-wire straightening and cut or coil feed, indexed grid positioning, multi-electrode resistance welding, controlled water cooling, automatic mesh advance, roll winding or panel shearing/stacking, weld and dimensional testing, packing and traceability. Reinforcing mesh and light galvanized roll mesh require different machines and must not share unverified specifications.

Why this project fits Afghanistan

- Construction, plaster reinforcement, fencing, cages and farm users consume standard welded mesh.
- One wire/aperture/width specification permits reliable electrode and transformer settings.
- Roll mesh is a lower entry than structural reinforcing panels when the market is retail construction.
- Weld shear strength, aperture, flatness and coating damage require continuous testing.

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

Launch one light roll-mesh product, not reinforcing steel mesh: for example 1.8-2.5 mm galvanized wire, 50 x 50 mm aperture and 1.5 m width, after buyer confirmation. Screen a matched roll-mesh welder with multi-coil line payoffs, automatic cross-wire feed, 60-100 strokes/min class, closed-loop cooling, mesh accumulator/winder, shear, weld tester and gauges. If 3-6 mm panels are the market, select the heavier panel machine and budget its transformer, cooling and power separately.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Light galvanized welded roll mesh	One wire diameter, aperture, width, roll length, weld strength, coating and mass	Plaster, fencing, cages and general construction
Welded panel mesh	Separate 3-6 mm wire, spacing, panel size, weld and flatness specification	Fencing or light reinforcement only after engineering approval

Machine selection is governed by wire diameter, mesh width, line/cross spacing, roll or panel output, welding transformers and incoming power. A light 1-2.8 mm roll machine cannot be marketed as a 5-12 mm reinforcing-mesh line. Acceptance records every electrode current/pressure, cooling flow, weld shear/pull result, aperture, width, roll/panel length, flatness, coating damage, scrap and sustained output.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Line-wire coil payoffs and guides	Feeds parallel wires at stable tension	Launch width/aperture
2	Cross-wire straightener/cutter and feeder	Supplies repeatable transverse wires	Coil or pre-cut route
3	Multi-electrode mesh welding machine	Resistance-welds every grid intersection	Wire class matched
4	Transformer, controls and closed-loop cooling	Delivers repeatable weld heat safely	Site power study
5	Mesh advance, shear and roll winder	Forms roll or panels	One launch output
6	Weld tester and dimensional laboratory	Releases mesh strength and geometry	Buyer test method

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

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Made-in-China supplier reference: real welded-wire mesh production line equipment.



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Made-in-China supplier reference: second real machine configuration for welded-wire mesh production line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Low-carbon bright or galvanized wire by diameter, tensile and coating specification
- Straps, wrap, labels, pallets or panel bearers
- Electrodes, guides, cutters, bearings and cooling spares

Utilities & infrastructure

- Dedicated three-phase transformer/load study for resistance welding
- Closed-loop cooling water with conductivity and flow control
- Dry wire/finished-mesh storage and safe coil handling
- Welding fume extraction, guarding and electrical isolation
- Straight material flow for rolls or panel stacks

Quality, safety and environmental controls

- Release wire diameter, tensile condition, surface and coating
- Control wire straightness and payoff tension
- Verify electrode pressure/current and cooling flow
- Test weld shear/pull at a defined sampling frequency
- Measure aperture, width, length, diagonal and flatness
- Inspect coating burn, broken welds, roll build and traceability

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 configuration makes one light welded roll mesh. A heavier 3-12 mm reinforcing-panel line, wire drawing/galvanizing, building and working wire stock are excluded.

Component	Indicative range	Notes
Payoffs, cross-wire feed and mesh welder	US\$24k-68k	Light roll-mesh basis
Transformer, cooling and electrical interface	US\$9k-28k	Site load dependent
Winder/shear, laboratory and handling	US\$7k-20k	One output format
Freight, installation, electrodes and spares	US\$9k-26k	Supplier commissioning
Indicative installed low-entry total	US\$49k-142k	Heavy reinforcement line, building and wire 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

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