



Water-Based Paint & Coating Production Line

Complete Turnkey Business Proposal



Made-in-China supplier reference: real water-based paint & coating production line equipment.

500-1,000 kg entry batch	1 white grade controlled launch	5-20 L pail sizes	8-12 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 line producing one interior water-based wall-paint family from approved mineral fillers and imported binder through water treatment, closed powder weighing, high-speed dispersion, controlled bead milling only where the formula requires it, let-down and tinting, viscosity and shade adjustment, filtration, batch laboratory release and 5-20 L pail filling. Solvent paint, resin synthesis and unknown formulas are excluded.

Why this project fits Afghanistan

- Housing and renovation create recurring demand for affordable interior paint.
- Afghan mineral filler can add local value after whiteness and particle-size qualification.
- Water-based production avoids the fire load of solvent coatings but still needs chemical controls.
- Hiding power, adhesion, scrub resistance, shade and shelf stability determine product credibility.

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 white interior emulsion paint and two package sizes at about 500-1,000 kg/batch. Use a dust-extracted powder station, high-speed disperser, jacketed let-down/tint tank, transfer pump, bag filter, semi-automatic net filler and a paint laboratory. Buy a validated binder/additive package and qualify Afghan calcium-carbonate filler before reducing imported content.

Manufacturing Process & Product Portfolio

Integrated process flow



Target products

Product	Typical specification	Primary market
Interior water-based emulsion wall paint	Declared volume solids, density, viscosity, fineness, hiding, whiteness, adhesion, scrub resistance, drying time and VOC	Afghan housing, schools and commercial interiors

A supplier machine does not supply a safe market-ready formula. Commissioning must use the exact binder, filler, pigment and additive system. Acceptance records dosing accuracy, dispersion temperature and time, fineness, viscosity, density, pH, shade, hiding, drying, adhesion, scrub resistance, freeze/heat stability and fill mass. Solvent and exterior-weathering products need separate engineering and tests.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Water-treatment and liquid dosing skid	Controls process water and additives	One formula
2	Enclosed powder station with extraction	Adds pigment/filler without dust release	Weighed batches
3	High-speed disperser	Wets and disperses solids	500-1,000 kg/batch
4	Let-down/tint tank and transfer pump	Adjusts final paint consistently	Jacketed as required
5	Bag filter and semi-auto pail filler	Removes agglomerates and packs paint	5-20 L
6	Paint laboratory	Releases performance and shade	Retained batch sample

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 water-based paint & coating production line equipment.



Made-in-China supplier reference: second real machine configuration for water-based paint & coating production line.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Qualified calcium carbonate or other approved mineral filler
- Purchased water-based acrylic or vinyl-acrylic binder
- Titanium dioxide, dispersant, thickener, defoamer, preservative and approved pigments
- Treated water, pails, lids, labels and pallets

Utilities & infrastructure

- Stable three-phase electricity with verified connected load
- Guarded machinery, lockout, ventilation and fire protection
- Covered segregated raw-material and finished-goods storage
- Maintenance tools, safe lifting and critical spare parts
- Local dust extraction and washable bunded chemical floor
- Temperature-controlled binder/additive storage
- Water-based chemical spill response and wastewater plan

Quality, safety and environmental controls

- Verify filler whiteness, moisture and particle distribution
- Approve binder, pigment and additive certificates
- Record sequence, speed, time and batch temperature
- Test fineness, viscosity, density, pH and shade
- Test hiding, drying, adhesion and scrub resistance
- Run accelerated stability and verify fill mass/code

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 entry makes one white interior water-based paint from a validated formula. Exterior, solvent, resin-making and broad colour ranges are deferred.

Component	Indicative range	Notes
Powder handling and high-speed disperser	US\$18k-45k	500-1,000 kg/batch
Let-down, filtration and semi-auto filling	US\$15k-38k	One white grade
Water treatment, dust control and laboratory	US\$12k-32k	Interior paint tests
Freight, installation and formula trials	US\$12k-30k	Two pail sizes
Indicative installed low-entry total	US\$57k-145k	Building, formula license and 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

- <https://jinzongmachinery.en.made-in-china.com/product/ljgmEOSCENcn/China-Water-Based-Paint-Production-Line-Complete-Paint-Production-Mixer.html>
- <https://karvil.en.made-in-china.com/product/hwPTsbVKbfan/China-Water-Based-Paint-Production-Line-with-Mixing-Equipment-and-Grinding-Equipment-and-Filling-Capping-Equipment.html>