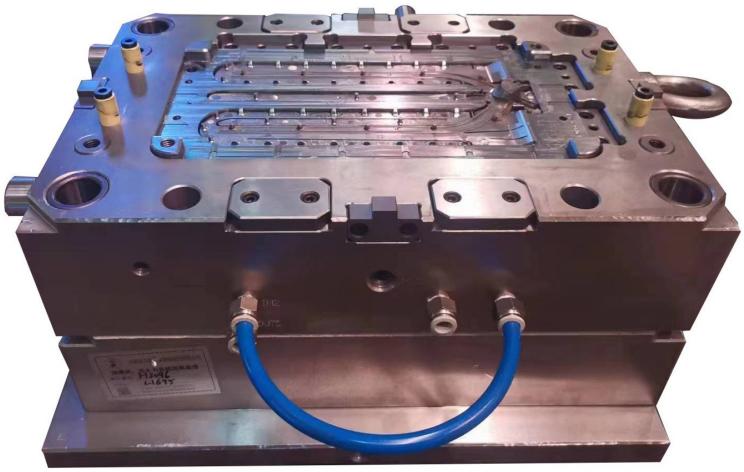
SANAATCHI
INDUSTRIAL VISION GROUP

Syringe & Medical-Disposable Factory

Complete Turnkey Business Proposal



Made-in-China supplier reference: real syringe & medical-disposable factory equipment.

bankable study	confirmed feedstock	EPC scope	quality laboratory
investment gate	**supply gate**	**delivery gate**	**release gate**

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

Medical-device facility that moulds or sources certified components, assembles syringes and selected disposables in controlled conditions, sterilises, packs, tests and releases traceable products under device-quality regulation.

Why this project fits Afghanistan

- This is a strategic plant, not a low-entry equipment package.
- Bankable feedstock, utility, permit, market, EPC and financing evidence is required before selection.
- Operate only with an independent laboratory, defined quality release and preventive-maintenance program.

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	Proceed only after device registration, ISO 13485/GMP-equivalent quality system, medical polymer supply, cleanroom/sterilisation route, validation, biocompatibility, waste handling and hospital/distributor demand are confirmed.

Manufacturing Process & Product Portfolio

Integrated process flow

Target products

Product	Typical specification	Primary market
Sterile syringes and regulated medical disposables	Syringe volume, needle/connection type, polymer grade, sterility method, package integrity, biocompatibility, traceability and device standard	Hospitals, clinics, pharmacies, aid programmes, licensed device distributors and regulated export markets

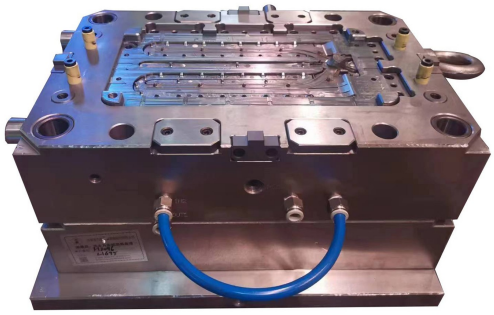
Final capacity, process, resource quality, utilities, permit conditions, emissions, acceptance test and commercial terms require independent engineering review before any order.

Core Equipment Schedule

Step	Equipment	Function	Indicative parameter
1	Medical polymer/component control	Qualifies inputs	Traceability and cleanliness
2	Injection moulding/assembly	Forms devices	Dimensions and fit
3	Needle/component integration	Builds final device	Safety and compatibility
4	Sterilisation and aeration	Creates sterile supply	Validated cycle
5	Packing, testing and release	Protects device	Seal and device quality

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 syringe & medical-disposable factory equipment.

Made-in-China supplier reference: second real machine configuration for syringe & medical-disposable factory.

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

Plant, Raw Materials & Utility Requirements

Raw materials

- Medical-grade polymers, needles/components, sterile barrier packaging, labels, sterilisation consumables, cleanroom materials, test fixtures and certified reference standards

Utilities & infrastructure

- Bankable electricity/fuel/water plans, process cooling and treatment, plant fire safety, laboratory, covered stores and qualified operation team
- Environmental permits, emissions control, waste route, maintenance workshop, critical spares and site-specific safety systems

Quality, safety and environmental controls

- Confirm device class/registration, polymer/needle suppliers, mould validation, cleanroom, sterilisation, biocompatibility, ISO quality system and clinical buyer requirement
- Control moulding, particulate/bioburden, assembly force, needle fit, sterilisation cycle, aeration, package seal and lot traceability
- Test dimensions, leakage, plunger force, sterility/bioburden, package integrity, ethylene oxide residuals if used and device 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

Medical disposables are regulated safety products. No facility should sell devices without device registration, validated sterilisation and an independent quality-release system.

Component	Indicative range	Notes
Moulding, assembly and component systems	US$35m-120m	Device portfolio
Sterilisation, cleanroom and packaging	US$30m-110m	Sterile barrier scope
QC, validation and installation	US$25m-90m	Device regulation critical
Indicative strategic project total	US$90m-320m	Registration, inventory and finance 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

- plastic-injection-moulding-line
- medical-syringe-mould