

Section II: Schedule of Requirements

Supply of Medical Equipments (Biomedical Waste Autoclaves 60 L , 40L, 20 L and Biomedical waste Shredder 25kg/hr) to Department of Health and Family Welfare, Government of Mizoram under Mizoram Health System Strengthening Project (MHSSP); e-Sourcing reference: (ITB/2025/55990)

A. Background:

The Health and Family Welfare Department (H&FW Dept.), Government of Mizoram with technical and financial support from the World Bank, is implementing 'Mizoram Health Systems Strengthening Project' (MHSSP) in the State for improving the health status of its citizens. The MHSSP intends to strengthen the management capacity and quality of health services in Mizoram. UNOPS is providing the Procurement services in this project for the identified list of Hospital Equipments and basic IT equipments required under the project. It will work closely with the Project Team of MHSSP and Department of Health & FW, Government of Mizoram.

B. Objective

The aim of this tender is to contract the supplier/s for the provision of supply of Medical Equipments to the Department of Health and Family Welfare, Government of Mizoram under Mizoram Health System Strengthening Project (MHSSP). Mizoram is a state in Northeast (NE) India, with "Aizawl" as its seat of government and capital city.

C. Technical specifications for Goods (Medical Equipments) and Comparative Data Table

E-sourcing reference no: (ITB-2025-55990)

Bidders are required to complete the **Comparative Data Tables** below to demonstrate compliance with UNOPS minimum requirements and insert them below. Bidders are NOT allowed to make any change in the "UNOPS requirements" columns of the Comparative Data Tables. Such changes might disqualify your Bid.

UNOPS requirement is comprised of the following lots:

Lot No.	UNOPS requirements	Quantity	Consignee-Facility
1	Biomedical Waste Autoclave 60 L (± 10%) - High pressure autoclave	11	District Hospital (DH) and Sub-district Hospital (SDH)
2	Biomedical Waste Shredder (25Kg / hr)- For DH/SDH	11	District Hospital (DH) and Sub-district Hospital (SDH)
3	Biomedical Waste Autoclave 40 L (± 10%) - High pressure autoclave	10	Community Health center (CHC)
4	Biomedical Waste Autoclave 20 L (± 10%) - High pressure autoclave	67	Primary Health Centre (PHC)

Note:

1. Offer must include all the costs associated with the Supply, Delivery, Installation, Testing and Commissioning etc. for the offered Lot/s at the designated installation sites. Bidders should quote 100% of the lot
2. Please Refer **Annexure I** for **Technical Specifications**
3. Please Refer **Annexure II** for **Consignee details**
4. The minimum technical requirements are provided in **Technical Bid Form (as Annex.III-Compliance Sheet; Form E, Section III)**. The Bidder shall complete it and submit it along with the bid, without which the bid will be rejected. Submit the compliance sheet in Company (if it's a Manufacturer)/OEM's (if it's not a Manufacturer) letterhead duly signed by the authorised signatory
5. The offered price must include warranty as per specification, commissioning and training.
6. **Remarks:** Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers, if any, specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, with little deviations in the technical specifications, provided that it demonstrates, to the Purchaser's satisfaction, that the product offered ensures substantial equivalence or is superior in performance to those specified in the Schedule of Requirements. Some deviations from the specifications will also be acceptable as long as the offered products ensure substantial equivalence or are superior in performance to those specified in the Schedule of Requirements.

D. Delivery requirements

UNOPS Requirements	
Who can participate	Manufacturers/Importers/ Authorized Distributors
Bid Validity	90 Days
Bid Security	Nil
Bid Currency	<i>Indian Rupees (INR)/USD</i> <i>**If any bidders wish to quote in any other form of currency, they can use the UNORE equivalence in INR (Indian Rupees) of the bid submission deadline.</i>
Delivery time	Bidder shall deliver the goods (100% quantity) within 60 days of issue of Purchase Order including installation, demonstration, testing and commissioning of the equipment and its accessories, including the training of end-users and maintenance staff at designated locations.
Delivery place (Consignee details)	Refer Annex.II (Multiple Consignees in Mizoram-District Hospitals, Sub-district hospitals, CHCs and PHCs/UPHCs in the state of Mizoram)
Incoterms Rules	DDP Final Destinations in Mizoram (Respective consignees) In addition to DDP, the Bidders shall also cover the costs and therefore include in the total price for the offered Lot(s) the cost of transport, offload, installation, basic configuration (as per manufacturer's official instructions) and demo in the premises of the beneficiaries. If required, the Bidders should also cover the costs related to export/import procedures, including the costs for engagement of the freight forwarder or the customs clearance agency. No additional cost will be borne by UNOPS and its client. No tax exemption is applicable.
UNOPS Right to vary requirements	At the time the Contract is awarded, UNOPS reserves the right to vary the quantity of the goods and associated services specified above, provided this does not exceed +/- 20% per lot, without any change in the unit prices or other terms and conditions of the ITB.
Notice	<ol style="list-style-type: none">1. UNOPS shall compare all substantially responsive bids to determine the Lowest priced substantially compliant offer. Bid comparison will be made on the total cost per lot, delivered to the final destination.2. At any time during the evaluation process UNOPS may request clarification or further information in writing from Bidders. The Bidder's responses shall not contain any changes regarding the substance, including the technical and financial part of their bid. UNOPS may use such information in interpreting and evaluating the relevant bid.3. UNOPS reserves the rights to accept or reject the bid without assigning any reason thereof.4. Any bidder who is blacklisted either by the Tender Inviting Authority or by any state Government or Central Government organization / UN agencies including World Bank for the quoted item/s is not eligible to participate in the bid during the period of

	blacklisting. Copies of stay order(s) if any against the blacklisting should be furnished along with the bid
Partial Bid	<p>Bidders shall be allowed to quote prices for one or more items identified in Section II: Schedule of Requirements. Evaluation will be done separately per each LOT. Partial bids are allowed. Bidders are allowed to quote for any lot. However, bidders have to quote for full quantity.</p> <p>UNOPS reserves the right to split the contract between several suppliers and place several contracts or place multiple awards for different Lots. UNOPS reserves the right to award partial quantities depending on the evaluation outcome.</p>
Alternative Bid	Not allowed
Sustainability Requirements – Gender issues (e.g. gender mainstreaming, women - owned businesses) and Environmental Management system	The bidder shall provide documentation (Self certification by the authorized signatory in the company letterhead) that details their approach to ensuring equal opportunity, diversity, and inclusion within their organization (e.g. equal pay policy, parental leave, the ratio of female to male employees, % of females in management positions, grievances disaggregated by gender, transparency of promotion criteria, sexual harassment policies etc.), Environmental management system. A statement with details on how diversity and inclusion / anti-discrimination are ensured in the organization.
Performance Security	<p>Performance Security (Applicable only for the winning bidder): The performance security shall be required from the successful Bidder in the amount of 5 % of the total Contract amount (In India Rupees), in the form of a Bank Guarantee as set out in the Performance Security Form (Refer Section III, Form I). To minimize Credit Risk, UNOPS will only accept Bank Guarantees from Banks or other Financial Institutions with a minimum Long Term Credit Rating of BBB- with Standard and Poor's, a minimum Long Term Credit Rating of Baa3 with Moody Investor Services, or a minimum Long Term Credit Rating of BBB- with Fitch Ratings. Any Bank Guarantee issued by a financial institution with a credit rating below the outlined credit ratings will require prior validation from UNOPS. Performance security should be valid for 6 months from the date of contract signature. The successful bidder has to submit the security within 7 days from the date of award the contract. The Tender Inviting Authority will release the Performance Security without any interest to the successful bidder on completion of the successful bidder's all contractual obligations confirming that all the contractual obligations have been successfully complied with.</p> <p>Withdrawal or non-compliance of agreed terms and conditions after the execution of agreement or issuance of Supply Order will lead to invoking of penal provisions and may also lead to black listing/debarring of the successful bidder and forfeiture of performance security.</p>
Liquidated damages	UNOPS will deduct from the Contract price, as liquidated damages, a sum equivalent to the percentage of 0.1% of the total Contract price of the delayed goods for each day of delay until actual delivery or performance, up to a maximum deduction of 10%. Once the maximum is reached, UNOPS may terminate the Contract pursuant to the General Conditions of Contract.

Payment Terms	Within 30 days after receipt of the goods/services as per tender conditions and on submission of payment documentation. Payment will be by direct transfer to the supplier's bank account.
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E. Inspections and tests

If the goods fail to meet the laid down specifications, the supplier shall take immediate steps to remedy the deficiency or replace the defective and damaged goods to the satisfaction of the purchaser without any additional cost.

F. Document Requirements – Comparative Data Table

UNOPS Requirements	
Documents	<p>The Bidder shall provide documentary evidence to demonstrate that the Goods offered by the Bidder meet the following requirement:</p> <ol style="list-style-type: none"> 1. The bidders must submit the Returnable Bidding Forms (Section III) along with the bid without which the bid will be rejected. 2. The bidder should be in continuous business for the provision of the same or similar goods in the past three (03) years, as demonstrated in the submitted certificate of incorporation document (Registration documents – Copy of the Certificate of State Registration). 3. Bidders must be registered in India. Copy/ies of Valid Certificate of Business Registration/Patent/Similar Legal Document of the bidder must be submitted. Companies that are not registered in India will be disqualified. 4. The bidder should have a relevant partner status with the manufacturer (OEM) for the provision of the quoted product. For this tender, the bidder shall provide proof of its partner status with the manufacturer. 5. The Bidder shall provide the Manufacturer's Authorization Form (Refer Section III; Form H) 6. In the event of a joint venture, the lead company must be registered in India or else the bidder will be disqualified. 7. OEM Should have local service Centre in consignee state (Mizoram and/or North East Region/Eastern Region of India) to provide uninterrupted services. 8. Bidder should have a local agent in the country/North East Region/Eastern region to provide support in installation, demonstration and preventive maintenance during the warranty period. 9. Bidders must submit Bid Specific Technical Compliance sheet for quoted products (Make & model) on OEM letterhead which is subject to verification of Genuineness of bidder, failing which the bid will be summarily rejected. 10. OEM Product with detail specification should be available in public domain. Please

provide the [link to the website](#).

11. Bidder shall provide the product Picture & Catalogue (product name, catalog number, and full detailed product information) of offered product demonstrating the technical specifications of the offered product.
12. **For Autoclaves: Offered product should adhere to the specification and it should be CE certified and BIS approved product. Submit the relevant certificates and web link as applicable.**

For Shredder: Product should adhere to the specification and it should be CE certified or BIS approved product.
13. **Performance criteria:** The Bidder should provide details in Performance Statement Form ([Refer Section III; Form G](#)) certifying that they have successfully executed a minimum 50% of the required quantity (as mentioned in schedule of requirement) (executed directly by manufacturer or through distributor) of the equipment(s)/ similar equipments mentioned in the schedule of requirement to any State or Central Government organizations / Corporate Hospitals / PSU Hospitals/ INGOs/UN Agencies in India/other countries.
As proof, the Bidder must submit purchase order copies in support of that in last 3 years, along with invoices or contracts in support of the provided information. The past performance of the Bidder shall be taken into account for evaluation.
14. **Turnover Criteria:** The bidder (Manufacturers/Importer) has a minimum average Annual Turnover of **Rs. 3 Crores or more** in the last three (3) financial years certified by the Chartered Accountant as per the format. In case of Distributor, they should have proof of Average Annual Turnover of **Rs. 2 Crores or more** in last three (3) financial years. The distributor should also submit the average annual turnover of the manufacturer/importer of the item(s).
15. Copy of audited financial statements duly certified by a Chartered Accountant in the letterhead with Unique Document Identification Number (UDIN) for the last 3 (three) years to be provided.
16. In case of Distributor, Bidders have to provide On-site Warranty on the items wherever it is indicated. The warranty certificate from OEM (OEM LETTER HEAD) must need to be attached in this bid.
17. Bidder warrants that offered items are new and unused (Self Certification in company Letter head).
18. **Sustainability Criteria:** The bidder shall provide documentation (Self certification by the authorized signatory in the company letterhead) that details their approach to ensuring equal opportunity, diversity, and inclusion within their organization (e.g. equal pay policy, parental leave, the ratio of female to male employees, % of females in management positions, grievances disaggregated by gender, transparency of promotion criteria, sexual harassment policies etc.), Environmental management system. A statement with details on how **diversity and inclusion / anti-discrimination** are ensured in the organization.

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| | <p>19. Warranty: 3 years on-site comprehensive warranty including Routine preventive maintenance, Breakdown and emergency repairs, Spare parts replacement (Spare Parts & Consumables- use only genuine OEM-approved spare parts), Calibration and validation, Technical support and troubleshooting etc. Maximum time to attend any Repair call is from 24 to 72 hours. Please include an escalation matrix. Spare Parts & Consumables- use only genuine OEM-approved spare parts.</p> <p>20. Any violation of standards and rules of ITB are subject to penal action by UNOPS and the client.</p> <p>21. UNOPS reserves the right to request further certified documents/evidence as needed.</p> |
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Annexure-I: Technical Specification

Specifications of Autoclave for Biomedical Waste

Lot-1: 60 Liters ($\pm 10\%$) for DH and SDH, Lot-3: 40 Liters ($\pm 10\%$) for CHC & Lot-4: 20 Liters ($\pm 10\%$) for PHC

Biomedical Waste Autoclave - High pressure autoclave

Quantities: 9 District Hospital (DH), 2 Sub-District Hospital, 10 CHC, 67 PHC/UPHC

- Vertical Autoclave - Steam jacketed
- Equipment should be designed for sterilization of regulated biomedical waste generated from hospital for destruction of bacteria and related organism (Spores).

Product Eligibility Criteria:

- Should be CE certified and BIS approved product.
- Manufacturer should be ISO certified for quality standards.
- Shall meet General Requirements of Safety for medical devices from a competent authority.
- Should have valid electrical and functional safety test report from ERTL / BIS or test report provided by Govt.
- Copy of the certificate/test report shall be produced along with the technical bid
- Should furnish necessary certificate from testing laboratory

Chamber Volume:

- Should have chamber volume of aprox. 60 Liters ($\pm 10\%$) for DH and SDH, 40 Litters ($\pm 10\%$) for CHC & 20 Litters ($\pm 10\%$) for PHC
- Should have a triple walled construction and steam jacketed type. (Operating a vacuum autoclave, medical waste shall be subjected to a minimum of three pre-vacuum pulse to purge the autoclave of all air.)
- The working chamber, steam jacket, outer chamber and the lid should be made of SS 316 grade.
- Should have water inlet and outlet valves.
- Should have a water level gauge.
- Should have gauges for measuring inner and outer steam pressure.
- Should have an inner temperature indicator.
- Should have automatic pressure control switch, safety valve and eject valve.
- Should have joint-less silicone gasket, with BIS rating
- Should have automatic low water protection (cut off with audible alarm) and should not use high voltage earthing system.
- Should have 121°C working temperature at 15 psi pressure per autoclave residence time of not more than 45 minutes or 135°C working temperature at 31 psi pressure per autoclave residence time of not more than 30 minutes. The air removed during the pre-vacuum, cycle should be decontaminated by means of HEPA and activated carbon filtration, steam treatment, or any other method to prevent release of pathogen
- Chamber volume for 60 Liters should be approximately 375mm diameter and 550mm depth. For 40 Liters should be approximately 325mm diameter and 500mm depth. For 20 Liters should be approximately 275mm diameter and 350mm depth
- Should have foot operated lid opening with radial locking lid.
- Should have vacuum system with minimum vacuum of 6 inches mercury (- 0.2 kg/ cm²)
- Should supply minimum 2 nos of bins of compatible & suitable size for autoclave.
- Water inlet and outlet pipe should be provided and connections should be done.
- The piping and the fittings are of stainless steel and brass.
- Epoxy powder coated compatible stand to place Autoclave

Spore testing: The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be *Geobacillusstearothermophilus* spores using vials or spore Strips; with at least 1×10^6 spores.

- The pressure test certificate should be submitted with the bid.

Stabilizer: Bidder shall provide appropriate stabilizer. Warranty: 3 years.

The equipment (Autoclaves) should have following features:

- Heating Element, should be BIS rating
- Pressure Gauge
- Digital Temperature & Pressure Indicator
- Temperature recorder with printing facility
- Steam release valve
- Door lock
- Safety valve
- User control
- Timer Alarm
- Water Level Indicator
- Biohazard symbol
- Warranty: 3 years on-site comprehensive warranty
- Documentation: 1. User's Manual, 2. Log-Book Epoxy powder coated compatible stand to place Autoclave
- Accessories required: Heating Element- 05 Nos, should be BIS rating
- Spare Parts & Consumables- use only genuine OEM-approved spare parts
- **Power requirement:** Power Input voltage- 220V AC, 50Hz, single-phase fitted with Indian plug of appropriate rating.

Lot-2: Technical Specification of Biomedical Waste Shredder (25Kg / hr)- For DH/SDH

General

1. Use

1.1	Overview of Functional Requirement	A closed system shredder designed for shredding of recyclable plastic hospital where the final treated waste should be non- reusable & non recognizable and should be reduced to 70 to 80% of the volume.
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Standards and Safety

2. Quality Standard relating to

2.1	Product	a) Product should be CE or BIS approved product. b) Cutter motor should be ISI marked. c) Should be CPCB approved with compliance under Gazette Notification 1998 and revisions there upon.
2.2	Manufacturer	Should be ISO 9001 certified for quality standards.
2.3	Electrical Safety	Should conform to the standards for electrical safety as per BIS.
2.4	Test certificates	Test certificates from Govt. approved laboratory or NABL approved laboratory for Steel grade certificate should be furnished in the technical bid.

Technical

3. Technical requirements, desirable characteristics:

3.1	Operational requirement	1. Should be of robust design with minimum maintenance requirement. 2. Should be properly designed and covered to avoid spillage and dust generation. It should be designed such that it has minimum manual handling. 3. The hopper and cutting chamber of the shredder should be so designed to accommodate the waste bag full of biomedical waste. 4. The shredder blade should be highly resistant and should be able to handle/ shred wet waste, especially after microwave/ autoclave/ hydroclave. 5. The motor should be connected to the shredder shaft through a gear mechanism, to ensure low rpm and safety for better gripping and cutting of the biomedical waste. 6. Should have induction motor and the minimum capacity of the motor attached with the shredder should be adequate enough for carrying out for 25 Kg/hr. This would ensure efficient cutting of the bio-medical waste as prescribed in the bio- medical waste (Management & handling) Rules. 7. Should be provided with sliding System to avoid spreading of waste during removal of collection trolley.
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3.2	Technical characteristics:	a) Capacity of Shredder: 25 Kg/Hr b) Type: Low Speed / Low RPM (preferably 30 to 40 rpm) c) Material of Construction of Outer Body: Mild Steel (M.S), 5 mm Thickness d) Material of Construction of Cutter : Non-Corrosive & hardened Alloy Steel e) Waste Feeding Platform: MS Structure having minimum 3 feet height from discharge point to ground level. f) Waste Feeding System : Manual Through Hopper g) Electric Load: 3 KW or less with at least 4HP induction motor h) Shaft : Double Shaft i) Drive : Belt or Gear Drive
3.7	Control Panel	a) Should be Pre-Wired and Powder Coated. b) Should be provided with auto stop/reversing, Emergency stop & Limit Switch with audio and/or visual alarm or indicator for the stoppage.
4. Safety Features to operate this type of device		
4.1	Operational Safeties	a) Interlocking with Limit Switch b) Shock proof & insulated as per safety norms. c) Protection against scattering of shredded waste
4.2	Safeties for Overloading	a) Reverse Motion to avoid overloading or jamming mechanism b) Motor overload protection.
4.3	Automatic emergency stop	a) Limit switch should be provided to switch off the Shredder if hopper lid or door of collection box is opened, so that shredder should stop automatically for safety of operator. b) In case of shock-loading (non-shred able material in the hopper), there should be a mechanism to automatically stop the shredder to avoid any emergency/ accident.
4.4	General Safety	a) The unit should be suitably designed for operator safety, mechanical as well as electrical. b) Anti-vibration mounting should be provided.
5. Physical Characteristics		
5.1	Noise (in dBA) & Vibration	Low Noise (below 60 dB) and No Vibration
5.2	Heat dissipation	Should maintain nominal Temp & heat should be disbursed by a cooling mechanism.
5.3	Mobility, portability	Stationary Installation Type
6. Energy Source (electricity, UPS, solar, gas, water etc.)		
6.1	Power requirement	Power Input voltage- 220V AC, 50Hz, single-phase fitted with Indian plug of appropriate rating.

6.2	Protection	a) Resettable overcurrent breaker, RCB, MCB, Dipole switch, fuse b) Voltage corrector as applicable for the product for protection against surge current & voltage fluctuations. c) Should have over-charging cut-off with visual symbol.
6.3	Warranty	3 years on-site comprehensive warranty including Routine preventive maintenance, Breakdown and emergency repairs, Spare parts replacement (Spare Parts & Consumables- use only genuine OEM-approved spare parts), Calibration and validation, Technical support and troubleshooting etc. Maximum time to attend any Repair call is from 24 to 72 hours. Please include an escalation matrix.