



क्रय अनुभाग  
वन अनुसंधान संस्थान  
(भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्)  
देहरादून-२४८००६, उत्तराखण्ड  
**GSTIN 05AAAAI1708G2Z6**  
PAN NO. AAAAI1708G

Purchase Section  
Forest Research Institute,  
(Indian Council of Forestry Research and Education)  
Dehradun-248006, UTTARAKHAND  
Phone: 0135-2224205  
<http://fri.icfre.gov.in/tender/>  
Email: [po\\_fri@icfre.org](mailto:po_fri@icfre.org)



## Notice Inviting Tender (E-Procurement mode)

### निविदा दस्तावेज/ Tender Document

Ref. No X-12/POFRI/SLV/DK/EAP/2022-23, Tender ID: 2022\_ICFRE\_701814\_1

Date: 20/07/2022

Bids under two bid systems (Technical and Commercial) are invited online at CPP Portal (<https://eprocure.gov.in/eprocure/app>) from the reputed manufacturer/authorized supplier/dealer for the following items. **Manual bids will not be accepted.**

#### वस्तु की तकनीकी विशिष्टताये / Technical Specification of item:

S. No.	Name of item	Quantity	Warranty	EMD (Rs.)	Tender Fee (Rs.)
1.	Construction, Installation, Testing, Commissioning of MIST CHAMBER	01 No.	One Year Comprehensive warranty	12,000/-	NIL

(For Detailed Technical Specification Please refer Annexure-VII)

नोट-1 : कृपया वस्तु का मूल्य एवं कर अलग-अलग दर्शाए/Please quote the rate & Taxes of the item separately

Note-2: E-way bill is to be issued by the Venders/Transporter

Note-3: The HSN / SAC Code of the item must be mentioned.

Technical Clarifications	Dr. Dinesh Kumar	Silviculture and Forest Management Division, FRI Dehradun	Ph: 0135-222-4610, Mobile- 9411173576 Email: <a href="mailto:kumard@icfre.org">kumard@icfre.org</a>
		Purchase Office, Forest Research Institute, Dehradun	Ph: 0135-222-4205, Email: <a href="mailto:po_fri@icfre.org">po_fri@icfre.org</a>

#### Critical Date Sheet

S. No.	Particulars	Date	Time	Location
1.	Published Date	20.07.2022	3:00 PM	FRI Website: <a href="http://fri.icfre.gov.in/tender/">http://fri.icfre.gov.in/tender/</a> and CPP portal: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>
2.	Bid Document Download Start Date	20.07.2022	03:30 PM	At CPP Portal as above
3.	Seek Clarifications Start Date	20.07.2022	05:00 PM	Through Phone/Email as mentioned above
4.	Bid Submission Start Date	20.07.2022	05:00 PM	At CPP Portal as above
5.	Seek Clarification End Date	05.08.2022	05:00 PM	Through Phone/Email as mentioned above
6.	Bid Submission End Date	10.08.2022	06:00 PM	At CPP Portal as above
7.	Bid Opening Date	12.08.2022	11:00 AM	CPP portal / At Purchase Section, FRI Main Building

The tender document can be downloaded from <http://eprocure.gov.in/eprocure/app> and be submitted only through the same website.

[PURCHASE OFFICER]

**CHECK LIST**  
(Eligibility Criteria for Bidders)

Bidders to indicate whether the following documents are uploaded by striking out the non-relevant option.

<b>Envelope – 1 (Technical Bid)</b> (Scanned copy of following documents to be uploaded on CPP Portal)			
S. No.	Content	Uploaded (Yes/No)/N.A.	Page No.
<b>Mandatory Requirement</b>			
1.	<b>EMD</b> OR Self attested copy of Exemption certificate		
2.	<b>AUTHORIZATION</b> certificate issued by the OEM, if applicable.		
3.	Self attested copy of <b>GST certificate</b> as applicable		
4.	Self attested copy of <b>PAN CARD</b> as applicable		
5.	Self attested copy of affidavit of <b>PARTNERSHIP DEED</b> as applicable.		
6.	<b>BIDDER'S PROFILE/INFORMATION FORM:</b> Annexure -II		
7.	<b>*COMPLIANCE SHEET</b> with any deviation: Annexure- III		
8.	<b>Tender Acceptance Letter</b> : Annexure- IV		
9.	<b>Copy of the balance sheet</b> of the bidder for the previous three financial years indicating the turnover in supply of the material.		
<b>Desirable Requirement</b>			
10.	<b>Copy of the previous two work order/supply orders</b> of the similar equipment/ item of last 3 years supplied to Central Govt./State/Govt./PSU/ CSIR/ICAR/ ICMR etc. enclosed/uploaded for reasonability of rates: Annexure-V		
11.	<b>*Printed CATALOGUE/BROUCHER/LEAFLET</b> of the quoted item(s) enclosed/uploaded.		

<b>Cover – 2 (Financial Bid)</b> (Following EXCEL document to be uploaded with BID on CPP portal)	

**1. Sl. No. 1 to 9 and financial bid (cover-2) are Mandatory requirements without which bid will be summarily rejected.**

**2. Checklist as per above Annexure-I, must be filled along with page numbers of tender document.**

**3. Above checklist (annexure-1) must be kept in the front part (first page) of tender document.**

**Note: - In Failing of above, bid shall be summarily rejected & no further correspondence in this regard will be entertained.**

Signature:  
Name:  
Designation:  
Seal of the Firm/Agency

## Instructions for Online Bid Submission

This tender document has been published on the Central Public Procurement Portal ([URL:https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)) & Institute website <http://fri.icfre.gov.in/tender/>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

### REGISTRATION

1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
7. The CPP Portal also has user manual with detailed guidelines on enrollment and participation in the online bidding process. Any queries related to process of online bids or queries related to CPP Portal may be directed to the 24x7 CPP Portal Helpdesk.  
The Institute will not be responsible for any type of technical issue regarding uploading of Tender on website.

### SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### PREPARATION OF BIDS

1. Bidder should take into account any corrigendum/clarifications published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS formats. Bid documents may be scanned with 100 dpi with black and white option.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My

Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### **SUBMISSION OF BIDS**

1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder should submit the Tender Fee/ EMD as specified in the tender. The hard copy should be posted/couriered given in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the same should be uploaded as part of the offer. The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the same.
4. Financial Bids can be submitted in **BOQ\_XXXX.xls format** (as given in the portal), the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.
5. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
6. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
7. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### **ASSISTANCE TO BIDDERS**

1. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 91-8826246593.

### **CHAPTER-1: INSTRUCTION TO BIDDERS**

**1.1 All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents.**

**1.2 Checklist as per Annexure-I, must be filled along with page numbers of tender document failing which bid is liable to be rejected and no further correspondence in this regard will be entertained.**

**1.3 Duly filled Annexure-1 must be placed in the front part of tender document.**

1.4 The Tender should be enclosed / uploaded with proper certifications like Agency Certification, Authorization certificate and /or Proprietary Certificate, as the case may be, in support of your offer.

**1.5 Supply means: "Construction, Installation, Testing, Commissioning".**

**1.6 बोली का जमा किया जाना / Submission of Bids:**

- (i) The bids should be submitted/uploaded ONLINE in two parts:
  - (a) **The Technical Bid (Documents as per CHECK LIST Annexure – I and others documents as per the requirement mentioned in the tender document)**
  - (b) **The Financial Bid (Online at CPP Portal in BoQ\_XXXX.xls format)**
- (ii) The bids should be printed on official pad preferably with GST Number of the firm.
- (iii) The bid should bear full details and where possible may be duly supported with catalogues, pamphlets, literature, samples of the item/items as the case may be for comparing the quality and rates of the item(s).
- (iv) Bid received after the closing date and time shall not be considered.
- (v) The transportation cost, insurance charge etc., if any, Percentage/ rate of GST or all other taxes and duties should be clearly mentioned.
- (vi) The bids / rates / tenders should remain valid for a minimum period of 90 days from the date of opening.
- (vii) **Since this purchase being for research purpose and ICFRE/FRI, Dehradun is registered in DSIR, New Delhi. It is therefore exempted from the payment of custom duty and GST @ 5% as per the Govt. Rules. The bidder should quote accordingly.**
- (viii) There should not be any over-writing or cutting on rates quoted. However, all cutting/corrections must be duly authenticated else the offer will be rejected.
- (ix) The rates shall not be subject to escalation of any nature.

- (x) The rates quoted should be applicable to educational institutions and any cost advantage received in lieu thereof should be passed on the Institution.
- (xi) **While quoting, the firm shall give an undertaking regarding Tender Acceptance Letter as per Annexure-IV.**
- (xii) The quotations should be given for the items in the same order & specification as in the enquiry letter/tender document.
- (xiii) Agreements/Purchase order/Completion certificates if any for similar works in other institutes, the details of such supplies for the preceding three years should be given together with the prices eventually or finally paid.
- (xiv) **Duly filled checklist as per Annexure-I should be submitted along with tender.**
- (xv) **Firm from India quoting on behalf of their foreign principal**
  - (a) Copy of agreement, with their foreign principal with the precise relationship between them, their mutual interest and nature of services which would be available from bidding firm from India, shall be submitted along with their tender.
  - (b) Price to be quoted in Indian Currency only.

#### 1.7 निविदा शुल्क/ Tender Fee एवं/and अग्रिम धन राशि / Earnest Money Deposit (EMD)

The Technical Bid should accompany an **EMD in the form of FDR / Bank Guarantee / Demand Draft only of the value mentioned at the first page of this tender document only for the equipment(s) bidding by the bidder as the case may be**, issued from any of the Commercial Banks of India drawn in favour of “Director, Forest Research Institute, Dehradun” valid 90 days beyond the validity period of bid. **The Bidder have to fill up EMD details online as per quoted items and send the hard copy of payment to the Purchase Section FRI, on or before the Bid Opening date and time as mentioned in Critical date sheet.**

The qualification in Technical bid will be subject to the receipt and acceptance of EMD within schedule date and time as mentioned in the NIT. FRI Dehradun shall not be responsible for any delay in receipt of EMD. In case the EMD is not received within the aforesaid period, the bid will be outrightly rejected. Original EMD should be submitted in a Separate Sealed Cover super-scribed as EMD for Tender no. & Item Name and the same to be addressed to: Purchase Section, FRI Dehradun-248006. No interest shall be claimed by the bidder on the EMD.

The Earnest Money to be forfeited, if wrong information is given in the tender to influence the tender cost or if bidder wants to withdraw his bid without any reliable reason.

The earnest money shall be refunded to all the unsuccessful firms, without any interest after finalization of the contract.

EMD shall be refunded to the successful firm on receipt of PBG/Security Deposit however Earnest Money may also be forfeited **if after the award of the contract firm fail to execute the contract.** No interest is payable on the EMD to either the successful firms or the unsuccessful firms.

##### **Exemption:-**

Exemption on submission of Tender Fee/EMD will be given against valid MSME/NSIC/KVIC certificate under valid category and within the validating period of the certificate.

Exemption on submission of Tender Fee/EMD will be given against valid MSME/NSIC/KVIC/Recognition certificate from Department for Promotion of Industry & Internal Trade [DPIIT] under valid category and within the validating period of the certificate.

##### **Note:-**

**Bidders claiming exemption of EMD as above are however cautioned that if they withdraw or modify their Bids during the period of validity, or if after the award of the contract if they fail to execute the contract, or to submit a performance security before the deadline given, they will be suspended for the period of 24 months from being eligible to submit Bids for tenders with FRI/ICFRE.**

#### 1.8 निष्पादन बैंक प्रत्याभूति/Performance Bank Guarantee (PBG)

1. 5% of the cost price in the form of Bank Guarantee or FDR pledged in favour of “Director, Forest Research Institute, Dehradun” is required to be submitted by the provisionally successful bidder which should remain valid at least during the **warranty period one year plus sixty days** (warranty period 1 year + 60 days).
2. The format of the PBG is available at the institute’s website ([fri.icfre.gov.in/downloads](http://fri.icfre.gov.in/downloads)). No interest shall be claimed by the bidder on the PBG submitted. The Bank Guarantee may be forfeited in case of improper services provided by the bidder/firm after verification from the concerned Consignee/HOD. Bank Guarantee will only be accepted in the form of FDR/Bank Guarantee. **Bank Guarantee in the form of demand draft will not be accepted.**
3. **Please note that supply/Work order shall be issued to eligible firm only after submission of PBG by the firm within the given period.** Failure to comply with the same shall result to Bid being cancelled and the EMD deposited with respect to the stated tender will be forfeited. Further, submission of Performance Bank Guarantee" does not entail any right to get the order, unless all the other Tender conditions are satisfied with due verification.

#### 1.9 बोलियों का खोला जाना / Opening of Bids:

- 1) The Technical Bids will be opened online at CPPP Portal (<https://eprocure.gov.in/eprocure/app>)-Please refer Critical Date Sheet.

- 2) **The Financial bids of only the Technically Qualified bidders will be opened. The date and time for opening the Financial Bid will be communicated to the respective firm later by the system (CPP Portal (<https://eprocure.gov.in/eprocure/app>))**
- 3) If there are any discrepancies in price schedule and tender document please refer to the BOQ in the Central Public Procurement Portal, the BOQ item/words/conditions mentioned in BOQ prevails
- 4) Representatives of the firm(s) may be present at the time of opening the financial bids if they so desire.

## CHAPTER-2: CONDITIONS OF CONTRACT

### 2.1 कीमत / Price

- (i) The price of the goods must be as per the BoQ.
- (ii) The price quoted shall be considered firm and no price escalation will be permitted. The price criteria should be on F.O.R., FRI Dehradun. Govt. levies like GST, if any, shall be paid at actual rates applicable on the date of delivery. The rates should be quoted accordingly giving the basic price, GST, if any.
- (iii) The rate of **GST applicable to FRI Dehradun is 5% and also exempted from the payment of custom duty** for the items procured for Research Purpose as per Notification No. 45/2017-Central Tax (Rates) New Delhi, 14<sup>th</sup> November, 2017 and Notification No.47/2017-Integrated Tax (Rate) New Delhi 14 November 2017. The bidder should quote accordingly. **Please note that GST Exemption shall not be applicable on AMC Charges.**
- (iv) The price mentioned in Financial Bid must be inclusive of transportation, insurance, Custom Clearance Charges (if any) loading/unloading, installation, commissioning, training, warranty, AMC (if any) and any other incidental/local service required for delivering the goods for desired destination as decided by FRI Dehradun.
- (v) The institute will not be responsible in case of the bidders failing to include charges towards insurance & transportation, installation, commissioning and training, warranty, AMC (if any). **The price mentioned in the financial bid will be final and the bidder has to comply with that, if awarded the tender.**

### 2.2 वारंटी सपोर्ट / Warranty Support

- (i) The items/equipment covered by the schedule of requirement shall carry the **COMPREHENSIVE warranty** of one year (01 Year) from the date of Installation of the items/ equipment in FRI Dehradun. This Warranty shall include free maintenance of the whole items/equipment supplied including free replacement of all parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 72 hours. The comprehensive warranty includes onsite warranty with all parts.
- (ii) The defects, if any, during the warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost of the part / machine, insurance, freight, custom duty or any other taxes or charges should be borne by the seller.
- (iii) The items/equipment must be supported by a Service Centre in India manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail
- (iv) The vendor/sellers will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- (v) Details of onsite warranty, agency who shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
- (vi) The Comprehensive warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.
- (vii) In case the guaranteed repair/replacement time not being met, the following penalty shall be levied:  
**Beyond 72 working hours (from the day of receipt of complaint) , the penalty shall be 0.10 % of the total value of Equipments/items per day.**

### 2.3 कार्य अनुबन्ध / Award of Contract:

The final selection of the bidder for the award of the contract will be made on the basis of the evaluation of techno-commercial proposal submitted by the prospective qualified bidders.

### 2.4 पूर्व आपूर्ति निरीक्षण/ Pre-supply Inspection:

Authorized representative of the Institute shall make the final inspection before supply of the item at site of the firm, if required.

### 2.5 वस्तु की आपूर्ति / Supply of Item:

The whole supply as per order shall have to be completed within the time mentioned in the order failing which the FRI Dehradun shall have the right to accept or reject any quantity of items ordered. The firm will have to arrange for supply of the material/ equipment in good condition.

## 2.6 क्षतिपूर्ति / Indemnity

The vendor shall indemnify, protect and save FRI Dehradun against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipments supplied by them.

## 2.7 भाड़ा व इन्श्योरेंस / Freight & Insurance

The equipment's to be supplied will be insured by the vendor against all risks of Loss or damage from the date of shipment till such time it is delivered at FRI, Dehradun, Uttarakhand site.

## 2.8 भुगतान की शर्तें / Payment Terms:

- (i) **No advance payments are allowed under any circumstances.**
- (ii) **Payment in INR for supply of goods:**
  - a) Where installation is not required: 100% payment will be made after satisfactory delivery of material duly certified by the HOD. **OR**
  - b) Where installation is required: 100% payment will be made after satisfactory delivery and installation of the material duly certified by the HOD. **OR**
  - c) 100% Advance will be paid against submission of 110% Bank Guarantee of the Total Order value subjected to the approval of competent authority.
- (iii) **Payment in INR for AMC/CMC/Service (if applicable)**
  - a) Quarterly/Half yearly after satisfactory completion of work/service duly certified by the H.O.D./P.I.

## 2.9 दंड/ Penalty for delayed Services/LD Charges:

A penalty of 0.5% of the total order value per week shall be levied for the any delay after the stipulated date mentioned in the Work Order/supply order/contract order subject to a maximum of 10% of the total order value. In case of the non-supply of the item after the acceptance of the work/supply order, EMD will be forfeited by the Institute and **Firm shall be suspended for the period of 24 months from being eligible to submit Bids for tenders with FRI/ICFRE.**

**Please note that no extension in delivery date will be given except force majeure conditions. Extension in delivery date, if any, shall be strictly subjected to deduction of LD Charges.**

## 2.10 अप्रत्याशित घटना/ Force Majeure:

For the purpose of and within the scope of contract by way of indication and not of limitation, the term "Force Mejeure" shall mean acts of nature, strikes, Lockouts, or other industrial disturbances, act of public/enemy, wars, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms lightening, flood, washouts, civil disturbances, explosion and any other similar even not within the control of either party on which by exercise of due care and diligence neither party is able to prevent or overcome.

## 2.11 मध्यस्थता/Arbitration:

In the event of any difference or dispute arising out this work, all effort shall be made by both the parties to settle the same amicably. Failing an amicable settlement, the dispute shall be finally settled through arbitration conducted under the Arbitration and Conciliation Act 1996, by arbitrators appointed in accordance with the said Act. The arbitration shall give reasoned and speaking award. All disputes are subject to Dehradun jurisdiction only.

## 2.12 बोली अस्वीकृती के लिए मानदंड/ Criteria for bid rejection:

- (i) If not received on or before due date and time.
- (ii) If the pages of Tender Document are not sequentially numbered and signed.
- (iii) If documents as per Annexure-I are not attached.
- (iv) If technical bid found without the required undertaking (Annexure-IV).
- (v) If it found at a later date that any information given in the bids is incorrect/false then the bid is liable to be disqualified/rejected.
- (vi) Canvassing in any form will result in disqualification.
- (vii) If "extra, as actual" etc. are mentioned against any of the price components in the bid, then the bid will be rejected.
- (viii) **If it is found that a bidder has submitted two/multiple bids for the same item/equipment, both/all the bids will be out rightly rejected.**
- (ix) If the firm quotes 'NIL' charges/ consideration, the bid shall be treated as unresponsive and will not be considered.

### 2.13 सत्यनिष्ठा संहिता /Code of Integrity

False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for upto 2 years as per rule 151 (iii) of the General Financial Rules along-with such other actions as may be permissible under law.

### 2.14 Fall Clause:

The Bidder undertakes that it has not supplied/is not supplying similar product/systems or subsystems OR providing similar services at a price/charge lower than that offered in the present bid in respect of any other ministry/department of the government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the bidder to any of the ministry/department of the government of India or a PSU at a lower price, then the very price with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the bidder to FRI Dehradun, if the contract has already been concluded.

### 2.15 दरों की तर्कसंगतता /Reasonability of rates

Before placement of the order, L1 firm may be required to provide the previous work order/supply order(s) of the same /similar equipment supplied by the firm in other institutions/govt. organizations to justify the reasonability of rates quoted by the firm.

## CHAPTER-3: SCHEDULES OF REQUIREMENTS

### 3.1 टिप्पणी / Note:

- (i) **Technical Bid in form of Annexure-I, II, III, IV, V and VII (blank signed price bid) has to be uploaded on CPP portal. Financial Bid in form of Excel file BoQ\_XXXX.xls has to be uploaded on CPP portal.**
- (ii) If the Supplier/firm is manufacturer/authorized dealer/sole distributor/of the item, the certificate to this effect should be attached/uploaded.
- (iii) Please note that the firm must submit the **separate compliance Statement** for each item quoting in Annexure-III in respect of all the specifications with the supporting printed catalogue/leaflet/Brochure of the quoted items with **highlighting their offered specifications.**
- (iv) It may also be noted that the tender bids received after the stipulated date & time or found incomplete and tender bids containing false/incorrect information shall be summarily rejected. The Institute shall not entertain any communication in this regard, whatsoever.
- (v) The firm is required to give its Bank Account details with IFSC for the purpose of making e-payment.
- (vi) The Forest Research Institute (FRI) Dehradun reserves the right to reject any quotation/bid wholly or partly without assigning any reason.
- (vii) The Forest Research Institute (FRI) Dehradun reserves the right to reject any quotation wholly or partly without assigning any reason.
- (viii) The quantity shown against the item is approximate and may vary as per demand of the Institute at the time placing order.
- (ix) The decision of the Institute in all matters relating to eligibility, acceptance, rejection of the bid will be final and binding on the applicants.
- (x) Forest Research Institute (FRI) Dehradun discourages High Sea Sale Purchase. All tenders with High Sea Sale will be rejected.
- (xi) The firms should clearly mention (in the financial bid) the Harmonized System of Classification (HS code) defined by the Central Custom and Excise Board (Govt. of India) for the item (s) involving import.
- (xii) **If the due date happens to be a holiday, then the TENDER FEE and EMD will be accepted till 3.00 PM on next working day followed by the holiday.**
- (xiii) If an agent submits bid on behalf of the Principal/OEM, the same agent can not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- (xiv) **Indian Agent should submit the certificate from the Foreign Principal that they are the Authorized & Registered Indian Agent.**
- (xv) The quantity shown in the tender can be increased or decreased to any extent depending upon the actual requirement. Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available at our Institute website <http://fri.icfre.gov.in/tender/>. Hence prospective bidders are advised to visit the Institute website regularly.
- (xvi) Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available CPP Portal (<https://eprocure.gov.in/eprocure/app>) and <http://fri.icfre.gov.in/tender/>. Hence prospective bidders are advised to visit the CPP Portal (<https://eprocure.gov.in/eprocure/app>) and <http://fri.icfre.gov.in/tender/>. regularly.
- (xvii) **Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is incorrect/false then the bid is liable to be disqualified/rejected.**



- (xviii) Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is incorrect/false then the bid is liable to be disqualified/rejected.
- (xix) Institute will not be responsible for non-receipt of bid(s) within the stipulated date due to any postal delay or delay for any other reason in transit.
- (xx) Before submission of bids, bidders should read the complete enquiry letter/tender document carefully and ensure that the bidders fulfill the eligibility criteria.
- (xxi) In case the item /product is under rate contract with DGS&D or GeM, then bidder should certify that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
- (xxii) In case calculation mistakes are found in the financial bid, then calculation shall be made by the Institute on the basis of rate per unit quoted by the bidders will be processed further.
- (xxiii) The Institute reserves the right to rectify any discrepancy of this advertisement, if found later on. In case of any inadvertent mistake in the process which may be detected at any stage even after the issue of purchase order, the Institute reserves the right to modify/withdraw/cancel any communication made to the bidder.
- (xxiv) In Item Wise BoQ\_XXXX.xls sheet, In column M, leave blank for the item/service not provided/quoted by you. If quoted 0 then it will be considered that the item/service will be provided free of cost.**
- (xxv) If there are any discrepancies in price schedule and tender document please refer to the BOQ in the Central Public Procurement Portal, the BOQ item/words/conditions mentioned in BOQ prevails.
- (xxvi) Indian Council of Forestry Research & Education, Dehradun is registered with the Department of Scientific and Industrial Research (DSIR) for purposes of availing customs duty exemption in terms of Government Notification No. 51/96-Customs dated 23 July, 1996. Notfn. No. 47/2017-Integrated Tax (Rate) dt. 14.11.2017 and Notfn. No. 45/2017-Central Tax (Rate) dt. 14.11.2017, Notfn. No. 45/2017-Union Territory Tax (Rate) dt. 14.11.2017, as amended from time to time.**

## Compliance of Restrictions under Rule 144 (xi) of GFR 2017:

Restrictions on procurement from a bidder of a country which shares a land border with India

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (Seller / Service Provider) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
  - a. An entity incorporated, established, or registered in such a country; or
  - b. A subsidiary of an entity incorporated, established, or registered in such a country; or
  - c. An entity substantially controlled through entities incorporated, established, or registered in such a country; or
  - d. An entity whose beneficial owner is situated in such a country; or
  - e. An Indian (or other) agent of such an entity; or
  - f. A natural person who is a citizen of such a country; or
  - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
  1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation—
    - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
    - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
  2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
  3. In case of an unincorporated association or body of individuals, beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
  4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
  5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. Any false declaration and non-compliance of the above would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

## Purchase Preference under 'Make in India' Policy

Under 'Make in India' policy of Government of India, Purchase Preference will be given to eligible bidders as per Public Procurement (Preference to Make in India), Order 2017 issued vide order No. P-45021/2/2017-B.E.-II dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020) of Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. Bidders are required to submit necessary certificates & documents as detailed in the above referred GOI Order in support of their claim to avail benefit against this order.

Note: The bidders who claim Purchase Preference under 'Make in India' Policy shall fulfil all requirements of tender document applicable for Indigenous Manufacturer.

'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

Local Supplier:

'Class-I Local Supplier' means a supplier whose product offered for procurement has local content equal to or more than 50%.

'Class-II Local Supplier' means a supplier whose product offered for procurement has local content more than 20% but less than 50%.

'Non-Local Supplier' means a supplier whose product offered for procurement has local content less than or equal to 20%.

**Margin of Purchase Preference:** For being eligible for purchase preference under this clause, the Margin of purchase preference shall be 20% (i.e. L1 + 20% band).

**Preference:** Purchase Preference shall be given to 'Class-I Local Supplier' only in the manner specified here under:

A. In the procurement of Goods which are divisible in nature:

- i. If L1 is from a 'Class-I local supplier', the contract for full quantity will be awarded to L1.
- ii. If L1 is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on 'Class-I local supplier', then such balance quantity may also be ordered on the L1 bidder.

B. In the procurement of Goods which are not divisible in nature:

- i. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.
- ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.
- iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.

C. 'Class-II local supplier' will not get purchase preference.

## **Verification of local content:**

- i. The 'Class-I local supplier' / 'Class-II local supplier' at the time of bidding shall be required to indicate percentage of Local Content and provide self-certification that the items offered meet the local content required for Class-I local supplier' / 'Class-II local supplier' and shall give the details of the location(s) at which the local value addition is made.
- ii. False declarations will attract banning of business of the bidder or its successor(s) for a minimum period of three years along with any other penal action as may be deemed fit including rejection of the offer, forfeiture of all dues including EMD/ Security Deposit / banning of the firm
- iii. A supplier who has been debarred by any procuring entity for violation of this order shall not be eligible for preference for procurement for the duration of debarment. It will be the bidder's responsibility to provide self-certification, clearly stating that the bidder is not serving debarment from any procuring entity for the tendered item at the time of tendering.

**Exemption of small purchases:** Procurements where the estimated value to be procured is less than Rs 5 (Five) Lakhs shall be exempt from above.

**Note:** The bidders who claim Purchase Preference under 'Make in India' Policy shall fulfill all requirements of tender document applicable for Indigenous Manufacturer.

### **Self-Certificate for Local Content**

\*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020)

OR

\*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.

The details of the location(s) at which the local value addition made is/are as under:

1.....

2.....

3.....

\* Strike out whichever is not applicable

Date:

Seal & Signature of the Bidder

<b>Chapter-4:</b>	<b>Specification and allied Technical details</b>	<b>Please See Annexure-I, II, III, IV, V &amp; VII</b>
<b>Chapter-5:</b>	<b>Price Schedule (to be utilized by the bidders for quoting their prices online in .XLS format at CPPP Portal (<a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a></b>	<b>Please See Annexure- VI &amp; Price Bid in BOQ_XXXX.XLS Format</b>
<b>Chapter 6:</b>	<b>Contract Form</b>	<b>Purchase Order is used as Contract Form</b>

**PURCHASE OFFICER,  
Forest Research Institute, Dehradun**

**BIDDER PROFILE/INFORMATION FORM**

(To be given on Company Letter Head)

**Company Name** :  
**Registration Number** :  
**Registered Address** :  
**Name of Partners /Directors** :  
 :  
**City** :  
**Postal Code** :  
**Company's Establishment Year :** :  
**Company's Nature of Business :** :  
**Company's Legal Status** 1) Limited Company  
**(tick on appropriate option)** 2) Undertaking  
 3) Joint Venture  
 4) Partnership  
 5) Others

**Company Category** 1) Micro Unit as per MSME  
**(tick on appropriate option)** 2) Small Unit as per MSME  
 3) Medium Unit as per MSME  
 4) Ancillary Unit  
 5) SSI  
 6) Others

**CONTACT DETAILS**

Contact Name :  
 Designation :  
 Email Id :  
 Phone No :  
 Mobile No :

**BANK DETAILS**

Name of Beneficiary :  
 A/c. No. CC/CD/SB/OD:  
 Name of Bank :  
 IFSC NO. (Bank) :  
 Branch Address:  
 Branch Code:  
 Other Details

**Vendor's PAN No.**  
**Vendor's CST No/LST No/WCT**  
**No/TIN No:**

**Signature:**  
**Name:**  
**Designation:**  
**Date:**  
**Seal of the Firm/Agency**

**COMPLIANCE STATEMENT OF SPECIFICATIONS**

(To be given on Company Letter Head)

विस्तृत विवरण अनुपालन रिपोर्ट के साथ प्रस्तुत किया जाना है (अपने आधिकारिक लेटरहेड पर विक्रेता/ फर्म द्वारा प्रस्तुत करने के लिए)

Detailed specification cum compliance report to be submitted with the Technical Bid (to be submitted by the vender/firm on its official letter head)

Name of the Item(s).....Make:.....Model:.....

Manufacturer/Authorized Distributer /Dealer/Supplier.....

**TECHNICAL SPECIFICATIONS:**

(For Detailed Technical Specification, Please refer Annexure-VII)

S. No.	Required Items Specifications/ Part/ Accessories as per Tender (Please provide point wise compliance of all the specifications)	Offered specification of item by the bidder (Please indicate the brand/make offered, wherever applicable)	Compliance (Yes/No)	Deviation, If any, in unambiguous terms	Documents attached in support
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					

I have also enclosed/uploaded all relevant documents as per the requirement in Annexure-VII in support of my claims (as above) in the following pages.

Signature:

Name:

Designation:

Date:

Seal of the Organisation

- Note:
- (i) Manufacturer/Authorized Distributer/Dealer/Supplier valid certificate must be enclosed/uploaded.
  - (ii) It is compulsory to enclose the printed Catalogue/Leaflet/Brochure etc. of the quoted items.
  - (iii) "Offered specification" should be filled up properly in the format provided above and should be **HIGHLIGHTED** in the enclosed/uploaded printed Catalogue/Leaflet/Brochure etc.
  - (iv) Separate Compliance Sheets (Annexure-III) must be attached/uploaded for different quoted Item(s)/Make/Model.

**उपक्रम/UNDERTAKING**  
**TENDER ACCEPTANCE LETTER**  
 (To be given on Company Letter Head)

Date: .....

To,

Director  
 Forest Research Institute  
 Dehradun-248006

**Sub: Acceptance of Terms & Conditions of Tender.****Ref. No X-12/POFRI/SLV/DK/EAP/2022-23, Tender ID: 2022\_ICFRE\_701814\_1****Date: 20/07/2022****Agreement/Contract Form**

Dear Sir,

- (i) I / We hereby certify that I / we have read the **entire terms and conditions of the tender documents** from (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall hereby abide by the terms / conditions / clauses contained therein.
- (ii) The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter
- (iii) **I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.**
- (iv) **I / We do hereby declare that our Firm has not been blacklisted/ debarred / banned by any Govt. Department/Public sector undertaking.**
- (v) I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.
- (vi) It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.

**Signature:****Name:****Designation:****Date:****Seal of the Firm/Agency**



## PREVIOUS WORK/SUPPLY ORDERS FORMAT

**Note:- Previous work/supply orders should be of quoted model or model similar to quoted model**

**Name of the Firm:**

Order placed by (Full address of Purchaser)	Name of the ordered equipment and quantity (Model and Make)	Order No., Date and quantity	Amount (Rs.)	Has the equipment been installed satisfactorily? (please attach documents)	Contact Person along with Telephone no., Fax no. and e- mail address

**Signature and Seal of the Manufacturer/ bidder .....**

**Place:**

**Date:**

**Note :** Please attach/upload self attested copy of the previous two work order/supply orders supplied during last three years period and/or performance certificate of successful installation/commissioning of the similar equipment/item from the Central Govt./State Govt./PSU/ CSIR/ICAR/ ICMR etc.

**COMMERCIAL/FINANCIAL BID**

(To be uploaded online at CPP Portal in BoQ\_XXXX.xls format)

Ref. No X-12/POFRI/SLV/DK/EAP/2022-23, Tender ID: 2022\_ICFRE\_701814\_1

Date: 20/07/2022

Rates: As per BoQ							
S. No.	Name of item / Specifications/ Make & Model.....	Qty.	Basic Rate (Rs. )	Excise Duty (Rs.)	*GST @ 5% (Rs.)	Other charges(Freight /custom clearance etc (Rs.)	TOTAL (Rs.)
1.01	Construction, Installation, Testing, Commissioning of MIST CHAMBER As per specification at Annexure-VII Make & Model.....	01	Rate per unit				
Total							
Grand Total Rs.							

**\*FRI Dehradun is eligible for concessional GST @ 5% and Custom Duty exemption for eligible equipments/items only as per Central Tax( Rate)/ Integrated tax ( Rate) Exemption Certificate in terms of Notification No.45/2017- Central Tax ( Rate) Dated 14.11.2017 and No.47/2017- Integrated Tax (Rate) Dated 14.11.2017 issued by Ministry of Finance, Department of Revenue, Government of India. Therefore the bidders are requested to quote rates accordingly.**

RATES: The rates quoted by the bidders, shall be firm and inclusive of all taxes (including GST, transport etc.,) and should include all charges (as applicable) for custom clearance, packing , forwarding, insurance, freight, delivery and unloading at FRI Dehradun, Uttarakhand. Rates to be quoted in INR Only as per the schedule given in BOQ.

**Term & Conditions:**

**Prices (if quoted in Rs.):** FOR FRI, DEHRADUN

- Validity of bid:** .....(Minimum 90 days)
- Delivery/Work completion period:** **Entire work to be completed within 35 days of issuing of supply/work order (to be adhered strictly)** Please note that no extension in delivery date will be given except force majeure conditions. Extension in delivery date, if any, shall be strictly subjected to deduction of LD Charges.
- Warranty:** One year comprehensive onsite warranty (refer clause 2.2)
- Rejection:** Bids if found not as per the required specification would be rejected.  
Bids not found as per the terms and conditions mentioned in the bid document, would be rejected.
- Penalty Clause:** As per clause 1.7 and 2.9 and other applicable clauses of tender document.  
In case of the non-supply of the item after the acceptance of the work/supply order, EMD will be forfeited by the Institute and firm shall be suspended from participating in tender with FRI/ICFRE for 24 months.
- PBG:** 5% of the total cost price in the form of Bank Guarantee or FDR pledged in favor of "Director, Forest Research Institute, Dehradun" which should remain valid at least during the one year warranty period plus sixty days. Please note that supply/Work order shall be issued to provisionally successful firm only after submission of PBG by the firm within the given period. Failure to comply with the same shall result to Bid being cancelled and the EMD deposited with respect to the stated tender will be forfeited. Further, submission of Performance Bank Guarantee" does not entail any right to get the order, unless all the other Tender conditions are satisfied with due verification.
- Customs Details:**
  - (i)** Forest Research Institute, Dehradun Custom House Agent (CHA) Address  
M/s Cwick (Import Consolidation), Private Limited, L-II/101, New Mahavir Nagar Extension,  
Outer Ring Road, New Delhi-110018,  
E-mail: info@cwickimport.com and followup@cwickimport.com  
Tel: + 91-09313996082, + 91-11-25996082, + 91-11-25992781
  - (ii)** Details of Institute:  
Import Export Code (IEC code FRI) – 0100000011  
AD CODE:- 02900682870007  
Union Bank of India, Main Branch, Rajpur Road, Dehradun-248001

It is certified that the rate quoted is not over and above (higher side) the rates under RC with DGS&D or GeM.

**Signature:**

Name:

Designation:

Seal of the firm/Organisation

Date

## SPECIFICATIONS

**Name of Item: Construction, Installation, Testing, Commissioning of Mist Chamber****Detailed Specifications for Mist Chamber**

S.N	Items	Description/ Specification
01	<b>Size</b>	Size: 4.5m width x 6m length x side height 7ft. and centre height 12ft. from ground level.
02	<b>Structure</b>	Zinc coated pipes as per Indian standards that prevents rusting of pipes and ensure long life of structure (more than 10 years). Dome shaped welded structure. Made of square GI pipe Hot Galvanized GI (47mmX47mm) IS 1239 anticorrosive humidity resistant pipe for maximum Indian wind load conditions, structural trusses will be provided for absolute strength wind load 120 km hr. Thickness: 2mm or more
03	<b>Cladding/ covering</b>	Cladding of multiwall polycarbonate sheet. 6mm thick All fittings of aluminum for polycarbonate sheet fixation <b>Sides &amp; Roof Covering</b> with 6mm double wall polycarbonate sheet fixed with anodized aluminum section. Silicone (Translucent) treatment for proper holding and thermal safety.
04	<b>Cooling System</b>	Cellulose pad 4ft. height. 4 inches thick, with gutter system, with complete PVC fittings, fitter, pump (1HP) water Tank 01 (1000lts.) Exhaust fans: 24 inches 2 nos.
05	<b>Humidity system</b>	12 nos. four-way foggers, discharge of 22.5LPH necessary PVC fittings, filter, pump (1HP) and water Tank (1000lts.). system capable to raise relative humidity up to 90%
06	<b>Heating system</b>	<b>Heaters:</b> Auto thermal cut off device. With thermostat protection two 2.4 KW heaters. 1200 RPM. ¼ HP fan motor, selective combustive material chosen for minimum utilization for atmospheric oxygen. Powder coated finish. Input 200-240 VAC, 50Hz. Single phase, Ambient 5°C to 50°C, RH up to 90%.
07	<b>Controllers</b>	<b>Control Panel:</b> Compact control panel facility will be provided with mains ON/OFF Switch, Light Indicator for main light, Cooling, Humidity. Control Panels manufactured with best quality CRCA sheet steel for lasting and the fine finish. The fabrication of different parts of the panel will be carried out on advanced CNC turret punching press and CNC press brake. All the modular parts sections are subjected to seven tank process to ensure anti-rust conditioning smooth finish and protection against corrosive atmosphere high humidity environment. High quality powder coating.  <b>Microclimate Temperature Controller</b> Specification: Real Time Microprocessor based user programmable PID Controller, 4 digit LED display for displaying measured values and another 4 digit LED display for displaying settings Trim pot operation. Platinum sensor probe pt- 100, set point lock within the setting panel to protect setting changes. Level lock to ensure that the parameter can be read but cannot be changed. Sensor failure indication. Display resolution 0.1 Accuracy $\pm 0.1^{\circ}\text{C}$ . automatic hysteresis control. Wide selectable temperature ranges from 0 to 100°C. 4.4KVA load can be directly connected to the powered output. Input 200-240 VAC. 50Hz. Single phase, Ambient 5-50°C, RH up to 90%. <b>Microclimate Humidity Controller</b> Specification: Real Time Microprocessor based On/Off control for Humidifying /Dehumidifying. Hysteresis differential 1%-9%. Delay timer 0-240 sec. Direct/Reverse selectable. Lock function to prevent miss operating. Feather touches operation. Fast response sensor- line resistance <10W. Display Accuracy indicating value 0.2% $\pm 1$ digit <b>Plitz / Cyclic Timer for humidity:</b> Specific for fogging, misting system, controlled by timer to reduce water logging condition. Specification: 0-999 Min./sec. ON 0-999 Min./Sec. OFF, automatic cycling, accuracy quartz, Power output can be directly drive misting unit load up to 4.4 KVA. Input 200V to 240 VAC. 50Hz. Phase single, 50 Hz. ambient 4°C to 50°C, RH up to 90%.
08	<b>Side curtain wall</b>	Brick masonry, 2ft. above ground and 1.0 ft. below ground. 9 inches thick, plastered.

09	<b>Floor</b>	Gravel
10	<b>Shade Net</b>	Green coloured 50% shade net at gutter height inside the mist chamber manually roll-able shade net.
11	<b>Ante-Room</b>	An ante-room size 2mx2mx2m with double doors, cladding of polycarbonate sheet 6mm thick. Ante room corridor will have side brick wall (2ft. above ground, 1ft. below ground), cemented (PCC) floor. <b>Air Curtain (1no.)</b> Size: 3' wide heavy duty, cabinets of Air curtain made of cold rolled mild steel sheets. The blowers should be made of high quality aluminum sheet with ½ HP motor & double blower system, powder coated finished at pre-entry point with auto main ON/OFF operation at the time of door opening/closing.
12	<b>Lighting</b>	LED light (8 nos.) and one digital illuminance meter
13	<b>Electrical Wiring</b>	All wires will be of copper suitable for the desired load, switches from reputed brand. high quality ISI approved fitting with copper multi-strand twisted Fire Resistant Grade wires standards of safety with proper MCB with appropriate electrical points of 5/15 amps combined (Havells/ Anchor make)
14.	<b>Warranty</b>	Complete one year warranty will be provided by the manufacturer

The mist chamber is to be installed in NTFP nursery in the campus of Forest Research Institute, Dehradun complete with all fittings and must be handed over by the firm in a ready-to-use condition.