

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
VIKRAM SARABHAI SPACE CENTRE (VSSC)
THIRUVANANTHAPURAM**

Tender for Industrial rotavapors 20L and 50L capacity

Bids to be submitted online

Tender No.: VSSC/PURCHASE UNIT III (SPRE)/VS202100316501 dated 25-08-2021

A. Tender Details

| | |
|------------------------|---|
| Tender No : | VSSC/PURCHASE UNIT III (SPRE)/VS202100316501 |
| Tender Date : | 25-08-2021 |
| Tender Classification: | GOODS |
| Purchase Entity : | PURCHASE UNIT III (SPRE) |
| Centre : | VIKRAM SARABHAI SPACE CENTRE (VSSC) |

Procurement of Industrial rotavapors 20L and 50L capacity

This tender is proposed as a DOMESTIC PUBLIC TENDER. This tender is restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision. Non-Local Suppliers need not quote.

Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.

Tenderers are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC. They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate break-up of components of main equipment, individual accessories and spares as desired.

This is a TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid. Uploading price details anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same.

Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.

The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made.

In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

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 up to two years as per Rule

151 (iii) of the General Financial Rules along with such other actions as may be permissible under law. Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage.

A.1 Tender Schedule

| | |
|------------------------------|-------------------------|
| Bid Submission Start Date : | 25-08-2021 17:00 |
| Bid Clarification Due Date : | 21-09-2021 17:00 |
| Bid Submission Due Date : | 28-09-2021 14:00 |
| Bid Opening Date : | 28-09-2021 14:01 |
| Price Bid Opening Date : | 12-10-2021 14:00 |

B. Tender Attachments

Technical Write-up/Drawings

Document : Specification 50L

Document : Specification

Instructions To Vendors

3. Instructions to Vendors

1. This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted.
2. Last minute clarification on tenders will not be entertained.
4. This tender is proposed as a DOMESTIC PUBLIC TENDER. This tender is restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision. Non-Local Suppliers need not quote.
5. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.
6. Tenderers are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC. They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate break-up of components of main equipment, individual accessories and spares as desired.
7. This is a TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid. Uploading price details anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same.
8. Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.
9. The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give

details of location (s) at which the local value addition is made.

10. In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

11. 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 up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

12. Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage.

C. Bid Templates

C.1 Technical Bid - Industrial rotavapors 20L and 50L capacity

1. Distillation Apparatus 50 liter capacity

Item specifications for Distillation Apparatus

| SI No | Specification | Value | Compliance | Offered Specification | Remark |
|-------|---|--|--------------------|-----------------------|--------|
| 1 | ITEM | INDUSTRIAL ROTAVAPOR (50 Liter Capacity) | Yes / No / Explain | | |
| 2 | Heating Bath | Electric Heating, | Yes / No / Explain | | |
| 3 | Heating capacity: | 3-4kW, Single phase, voltage: 220-240V, 50-60Hz | Yes / No / Explain | | |
| 4 | Temp. control: | digital | Yes / No / Explain | | |
| 5 | Should be suitable | for both water and Oil. | Yes / No / Explain | | |
| 6 | Temp range | 20°C-180°C | Yes / No / Explain | | |
| 7 | provision for auto cut off if temperature shoots up above set temperature | Should be available | Yes / No / Explain | | |
| 8 | Flask details | Evaporation Flask capacity 50L spherical, 1 No. Borosilicate | Yes / No / Explain | | |
| 9 | Receiver Flask capacity- | 20L spherical borosilicate, 1 No. with provision for bottom draining | Yes / No / Explain | | |
| 10 | Rotation Speed | Up to 120 r.p.m | Yes / No / Explain | | |
| 11 | Condenser | Ascending condenser type with 1.5-2.0 m ² surface area | Yes / No / Explain | | |
| 12 | Power supply: | 400-440V ,3phase,50-60HZ | Yes / No / Explain | | |

| | | | | | |
|----|--|--|--------------------|--|--|
| 13 | Control Panel | Should include temperature indicator, vapor temperature indicator temperature controller & Evaporation flask Speed controller. | Yes / No / Explain | | |
| 14 | Support frame | SS 304 make | Yes / No / Explain | | |
| 15 | Lifting mechanism | Mechanical Lift | Yes / No / Explain | | |
| 16 | RECIRCULATING COOLER/CHILLER, Temperature range (°C) | 5°C to + 25 °C | Yes / No / Explain | | |
| 17 | RECIRCULATING COOLER/CHILLER, Setting / RECIRCULATING COOLER/CHILLER, display resolution | 0.2 ±0.1 °C | Yes / No / Explain | | |
| 18 | Cooling capacity | 5000W at 20°C and 3600W at 10 °C | Yes / No / Explain | | |
| 19 | Temperature Display | Digital, touch key display for set temperature and actual temperature | Yes / No / Explain | | |
| 20 | Filling volume liters | 5-10 L | Yes / No / Explain | | |
| 21 | Refrigerant | CFC free | Yes / No / Explain | | |
| 22 | Digital interface | Should be provided | Yes / No / Explain | | |
| 23 | Voltage | 220-230V ,1phase,50-60HZ | Yes / No / Explain | | |

2. Distillation Apparatus 20Liter capacity

Item specifications for Distillation Apparatus

| SI No | Specification | Value | Compliance | Offered Specification | Remark |
|-------|---------------|---------------------------------------|--------------------|-----------------------|--------|
| 1 | ITEM | Industrial Rotavapor-20Liter Capacity | Yes / No / Explain | | |
| 2 | Heating Bath | Electric Heating | Yes / No / Explain | | |

| | | | | | |
|----|---|---|--------------------|--|--|
| 3 | Volume of heating bath | 25 ± 5 L | Yes / No / Explain | | |
| 4 | Heating capacity: | 3-4 kw | Yes / No / Explain | | |
| 5 | Should be suitable for | both water and Oil. | Yes / No / Explain | | |
| 6 | Temp. control | : digital | Yes / No / Explain | | |
| 7 | Temp range | 20°C-180°C | Yes / No / Explain | | |
| 8 | Temp. Accuracy | +/- 2 deg C | Yes / No / Explain | | |
| 9 | provision for auto cut off if temperature shoots above the set temperature | Should be provided | Yes / No / Explain | | |
| 10 | Flask details | Evaporation Flask capacity 20L spherical, 1 No. | Yes / No / Explain | | |
| 11 | Receiver Flask capacity- | 10L spherical, 1 No. with provision for bottom draining | Yes / No / Explain | | |
| 12 | Glass | Borosilicate grade 3.3 | Yes / No / Explain | | |
| 13 | The evaporation flask coupling should be | snap flange coupling for comfortable use. | Yes / No / Explain | | |
| 14 | Valves of glass assembly should be spring driven and provision for preventing glass breakage due to overturning | should be provided. | Yes / No / Explain | | |
| 15 | Suction mechanism for removing sample from evaporating flask without the need for detaching the flask | should be provided. | Yes / No / Explain | | |
| 16 | Condenser | Ascending condenser type with 1.0-2.0 m ² surface area | Yes / No / Explain | | |
| 17 | Electronically controlled rotational speed | Upto 150 rpm | Yes / No / Explain | | |
| 18 | Power supply: | 400-440V ,3phase,50-60HZ | Yes / No / Explain | | |

| | | | | | |
|----|---|--|--------------------|--|--|
| 19 | Control Panel | Should include temperature indicator, Vacuum pressure, coolant temperature and vapor temperature, rotation speed, bath temp, build in timer. | Yes / No / Explain | | |
| 20 | Emergency stop button automatically lowers bath, stops rotation, breaks vacuum and turns off the Bath heaters | should be provided. | Yes / No / Explain | | |
| 21 | Support frame | SS 304 with powder coated epoxy | Yes / No / Explain | | |
| 22 | Lifting mechanism | Automatic | Yes / No / Explain | | |
| 23 | Shut-off valve, feed valve, drain valve and aeration valve | Should be provided | Yes / No / Explain | | |
| 24 | Provision for exporting all process parameters and set values to a PC | should be provided. | Yes / No / Explain | | |
| 25 | Industrial vacuum pump | Oil free, single stroke speed control vacuum pump with Soundproofing with enclosed housing which minimizes noise and vibrations | Yes / No / Explain | | |
| 26 | Industrial vacuum pump design | Should be Compact design with integrated carrying handle | Yes / No / Explain | | |
| 27 | vacuum pump | Should have Chemically resistant PTFE diaphragm pumps. | Yes / No / Explain | | |
| 28 | Capacity of vacuum pump | 3± 0.2 m3/ h | Yes / No / Explain | | |
| 29 | Industrial vacuum pump, Ultimate Vacuum (absolute) | 2 mbar | Yes / No / Explain | | |
| 30 | Industrial vacuum pump, Vacuum connection | GL 14 | Yes / No / Explain | | |
| 31 | Industrial vacuum pump, Supply voltage | 100-240 V/50-60 Hz | Yes / No / Explain | | |
| 32 | Industrial vacuum pump, Motor | Brushless DC motor | Yes / No / Explain | | |

| | | | | | |
|----|---|---|--------------------|--|--|
| 33 | Industrial vacuum pump, Revolution speed | Max. 1600 rpm | Yes / No / Explain | | |
| 34 | Industrial vacuum pump, Sound level | 40-60 dB (A) | Yes / No / Explain | | |
| 35 | Industrial vacuum pump, Materials in contact with medium | PEEK, PTFE, glass, FEP | Yes / No / Explain | | |
| 36 | RECIRCULATING COOLER/CHILLER, ECIRCULATING COOLER/CHILLER, Temperature range (°C) | -10°C to + 25 °C | Yes / No / Explain | | |
| 37 | RECIRCULATING COOLER/CHILLER, Setting / display resolution | 0.2 ±0.1 °C | Yes / No / Explain | | |
| 38 | RECIRCULATING COOLER/CHILLER, Cooling capacity | 600W at -20°C and 3000W at 20°C | Yes / No / Explain | | |
| 39 | RECIRCULATING COOLER/CHILLER, Temperature Display | Digital, touch key display for set temperature and actual temperature | Yes / No / Explain | | |
| 40 | RECIRCULATING COOLER/CHILLER, Filling volume liters | 5-10 L | Yes / No / Explain | | |
| 41 | RECIRCULATING COOLER/CHILLER, Refrigerant | CFC free | Yes / No / Explain | | |
| 42 | RECIRCULATING COOLER/CHILLER, Digital interface | Should be provided | Yes / No / Explain | | |
| 43 | RECIRCULATING COOLER/CHILLER, Voltage | 230V , 1phase, 50-60HZ | Yes / No / Explain | | |
| 44 | Chiller should be | compact, and able to mobile on wheels with a space-saving design | Yes / No / Explain | | |

Supporting Documents required from Vendor

1. Brochures/Catalogues of company with details

2. Unpriced Bid showing the split up of main equipment, accessories, essential spares as applicable

3. Detailed Techno commercial offer(without price details)

4. Unpriced AMC Quote in Split-up format for each year required.

5. Unpriced list of essential/ optional spares for 3 years maintenance.

6. Declaration regarding the percentage of local content (or value addition) in the item offered.

7. Detailed Compliance Matrix vis-a-vis the item specification in tenders.

8. Additional Documents from Vendor.

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

| Sl. No. | Description | Compliance | Vendor Terms |
|---------|---|--------------------|--------------|
| 1 | Installation, commissioning and on-site user training are to be provided by the party free of cost. | Yes / No / Explain | |
| 2 | Recommended set of spare parts and consumables for two years of operation should be supplied. (please provide a complete list of spare parts with item-wise price). | Yes / No / Explain | |
| 3 | Guarantee/warranty: The complete supply must be guaranteed for free repair/replacement for 24 months from the date of installation, commissioning and acceptance by VSSC. | Yes / No / Explain | |
| 4 | 3 years' AMC from 3rd year onwards should be provided. The AMC cost needs to be included in the quotation. | Yes / No / Explain | |
| 5 | During guarantee period, spares taken from our stock, if any, should be replaced by the party free of cost | Yes / No / Explain | |
| 6 | All corrosive components should be painted with anticorrosive paint. | Yes / No / Explain | |
| 7 | Party should provide all accessories and tools required for the complete installation of the machine. | Yes / No / Explain | |
| 8 | Party should provide all utility requirements from VSSC for the complete installation and demonstration of the operation of the instrument | Yes / No / Explain | |
| 9 | Party should be ready to accommodate any minor modifications, if required. | Yes / No / Explain | |
| 10 | Pre-delivery inspection should be arranged | Yes / No / Explain | |
| 11 | Party has to give a compliance matrix along with the offer. Otherwise, the offer will not be accepted. | Yes / No / Explain | |
| 12 | Name and contact details (including phone and fax numbers, email addresses) of the users of the instrument, both in India and abroad, should be provided. | Yes / No / Explain | |
| 13 | Full certifications (including ISO, calibration certificate and traceability certificate for any standards used for calibration) should be provided for all the items. | Yes / No / Explain | |

| | | | |
|----|--|--------------------|--|
| 14 | All subsystems, accessories and optional accessories mentioned in the specification should be quoted separately. | Yes / No / Explain | |
| 15 | Technical bid and price bid should be sent separately in sealed envelopes. Price bid should be sent strictly as hard copy only. Price bid should not be sent as email or email attachment. | Yes / No / Explain | |
| 16 | A computer with the latest Pentium processor and latest version of Windows based operating system the time of supply should be provided along with a colour laser printer. | Yes / No / Explain | |
| 17 | The computer should facilitate the control of the instrument and accessories through the supplied software. | Yes / No / Explain | |
| 18 | The cost of the PC and related peripherals can be quoted separately. Party should take the responsibility of the service of the computer and printer. | Yes / No / Explain | |
| 19 | The cost of the PC and related peripherals can be quoted separately. Party should take the responsibility of the service of the computer and printer. | Yes / No / Explain | |
| 20 | All necessary safety interlocks and earthing should be provided for operator's safety | Yes / No / Explain | |
| 21 | Detailed description of the control system is to be provided. | Yes / No / Explain | |
| 22 | Operation/maintenance manual, troubleshooting flowchart, detailed wiring diagrams/circuit, and maintenance tool kits are to be provided. | Yes / No / Explain | |
| 23 | Full technical details in English (both hard and soft copies) should be provided supported by well-documented catalogues/leaflets of the version supplied. | Yes / No / Explain | |

| | | | |
|----|---|--------------------|--|
| 24 | The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself. Confirm attachment of Self declaration along with the offer. | Yes / No / Explain | |
| 25 | PO Ordering Address with Name and Contact Details of Sales Person concerned (e-mail and phone number). | Yes / No / Explain | |
| 26 | Any Other Terms | Yes / No / Explain | |
| 27 | Taxes and other costs, if any . [Note: VSSC is a Public Funded Research Institution under the administrative control of Department of Space and is eligible for partial exemption of IGST @5% vide Notfn No. 45/2017, 47/2017 dt 14.11.2017 respectively. Necessary IGST EXEMPTION CERTIFICATE shall be issued.] | Yes / No / Explain | |
| 28 | Security Deposit (Applicable if Offer Value is Rs. 5 Lakhs or above. MSME/NSIC Units are NOT EXEMPTED from the payment of SD. Bank Guarantee @ 3% of Order Value valid till 60 days from the date of supply to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indentity Bond in lieu of BG. In the event of non-performance of contractual obligations, SD will be forfeited). | Yes / No / Explain | |
| 29 | Delivery Terms. | Yes / No / Explain | |
| 30 | Delivery Period | Yes / No / Explain | |
| 31 | Liquidated Damages (Applicable beyond the delivery period mentioned in this tender @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value. Mandatory compliance required). | Yes / No / Explain | |

| | | | |
|----|---|--------------------|--|
| 32 | Warranty (Minimum of 24 months) | Yes / No / Explain | |
| 33 | Performance Bank Guarantee (PBG) Bank Guarantee @ 3% of Order Value valid till the completion of warranty period plus 2 months claim period to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indemnity Bond in lieu of BG. In the event of non-performance of warranty obligations, PBG will be forfeited). | Yes / No / Explain | |
| 34 | Payment Term: (Our Default payment term: For indigenous orders: 100% within 30 days after receipt and acceptance of item at our site. For import cases: 100% by Sight Draft with Bank Charges to respective accounts. NOTE: CONSEQUENT TO COVID 19 PANDEMIC AND AS PER EXTANT GUIDELINES FROM DEPARTMENT OF SPACE, NO ADVANCE PAYMENT IS PAYABLE TO THIS TENDER). | Yes / No / Explain | |
| 35 | Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) More than 20% but less than 50% : Class-II local supplier. c) Less than or equal to 20% : Non-local supplier. Mention your category. | Yes / No / Explain | |
| 36 | Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions. | Yes / No / Explain | |
| 37 | Validity | Yes / No / Explain | |

| | | | |
|----|--|--------------------|--|
| 38 | Acceptance to provide Non-Comprehensive AMC for a period of 3 years after the completion of warranty period. AMC cost shall only be mentioned in the specific slot in price bid. | Yes / No / Explain | |
| 39 | List of essential spares for the trouble free operation of the equipment to be uploaded (without price details). Details of optional spares may also be provided (without price details). | Yes / No / Explain | |
| 40 | Kindly ensure that NO DOCUMENTS WITH PRICE DETAILS ARE UPLOADED. Price shall only be mentioned in the price bid. Uploaded documents with price details shall summarily be rejected. | Yes / No / Explain | |
| 41 | Ensure you are a Class-I Local Supplier/ Class-II Local Supplier. The offer shall be in INR only. Bids from foreign OEMs and offer on High Sea Sales basis are not allowed. Please mention the category of the bidder. | Yes / No / Explain | |

C.3 Price Bid

| Sl. No. | Item | Quantity | Unit Price | Currency | Total Price | Remark |
|---------|--|-----------|------------|----------|-------------|--------|
| 1 | Distillation Apparatus 50 liter capacity | 1.00 Nos. | | - | | |
| 2 | Distillation Apparatus 20Liter capacity | 1.00 Nos. | | - | | |

Common charges (Applicable for all items)

| | |
|--|--|
| Annual Maintenance Contract Charges | |
| Optional Spares Cost (lumpsum) | |
| Any Other Charges | |
| Essential Spares Cost (lumpsum) | |
| Packing and Forwarding Charges | |
| Freight charge | |

| | |
|---|--|
| Installation & Commissioning Charges | |
|---|--|