

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

Tender for Nozzle Free Ultrasonic Spray coating machine

Bids to be submitted online

Tender No.: VSSC/PURCHASE UNIT III (SPRE)/VS202100095201 dated 13-08-2021

A. Tender Details

Tender No :	VSSC/PURCHASE UNIT III (SPRE)/VS202100095201
Tender Date :	13-08-2021
Tender Classification:	GOODS
Purchase Entity :	PURCHASE UNIT III (SPRE)
Centre :	VIKRAM SARABHAI SPACE CENTRE (VSSC)

Procurement of Nozzle Free Ultrasonic Spray coating machine

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 :	13-08-2021 12:00
Bid Clarification Due Date :	24-08-2021 11:00
Bid Submission Due Date :	14-09-2021 14:00
Bid Opening Date :	14-09-2021 14:01
Price Bid Opening Date :	01-10-2021 14:00

B. Tender Attachments

NA

Instructions To Vendors

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.
7. 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.
8. 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.

9. 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.

10. 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 - Nozzle Free Ultrasonic Spray coating machine

1. Nozzle Free Ultrasonic Coating Machine

Item specifications for Nozzle Free Ultrasonic Coating Machine

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Spray Coating Type	Nozzle Free Ultrasonic Spray coater	Yes / No / Explain		
2	Ultrasound Frequency	35 ± 5 KHz	Yes / No / Explain		
3	Single pass coating width	10 to 25 mm	Yes / No / Explain		
4	Spray Coating Pattern	Rectangular and Circular	Yes / No / Explain		
5	Coating thickness uniformity	Single pass coating thickness variation < ± 5%	Yes / No / Explain		
6	Coating Slurry Viscosity	up to 40 cp.	Yes / No / Explain		
7	Coating Area	750 x 750 mm (min.)	Yes / No / Explain		
8	Coating Slurry Flow Rate	0.5 to 30 ml/min.	Yes / No / Explain		
9	Coating Slurry Reservoir Capacity	500 ml (min.)	Yes / No / Explain		
10	Minimum Slurry Volume required for coating	>25 ml	Yes / No / Explain		
11	Coating Slurry solids content	up to 50% solids	Yes / No / Explain		
12	Vacuum hot plate size	750 x 750 mm (min.)	Yes / No / Explain		
13	Fluid lines and Substrate holding Vacuum Hot plate compatibility	Shall be compatible with solvents: IPA, N-Methyl Pyrolidone, Butyl Acetate, butyl alcohol and lonomer dispersions which is acidic in nature.	Yes / No / Explain		

14	Spray Head Positioning resolution	0.025 mm (min.)	Yes / No / Explain		
15	Spray Head Positioning accuracy	± 0.05 mm (min.)	Yes / No / Explain		
16	Spray Head speed	10 to 250 mm/sec	Yes / No / Explain		
17	Spray head rotation	90-degree	Yes / No / Explain		
18	Global standards compliance	CE / NFPA 79 or their equivalent	Yes / No / Explain		
19	Safety interlocks:	i. Interlocked guard door ii. Servo motor torque limit and limit switches for X-Y movement iii. Alarm for low exhaust / vapour build-up in side spray cabin	Yes / No / Explain		
20	Input power	220 ± 10% VAC, 50/60 Hz,	Yes / No / Explain		
21	Detailed Technical Requirements	as given below	Yes / No / Explain		

22	Liquid delivery system	<p>a. Liquid delivery system shall be synchronized with spray heads through control system and software.</p> <p>b. Liquid delivery to the spray head shall be based on stepper motor and liquid dispensing shall be volume based.</p> <p>c. It shall have slurry holding reservoir with provision for stirring and automatic refilling of coating slurry to liquid dispensing system.</p> <p>d. It shall have capability to continuously serve the slurry for production requirement.</p> <p>e. There shall be minimum two liquid delivery syringes to operate the system in continuous production mode and recirculation of the slurry to reservoir to avoid settling of the slurry.</p> <p>f. It shall have built in functions to recover coating slurry from feed lines to back into syringe / reservoir.</p>	Yes / No / Explain		
23	Vacuum hot plate for holding substrate:	<p>a. Plate size: 750 mm x 750 mm size (min.)</p> <p>b. Uniformly porous platform with integrated vacuum supply to hold the substrates.</p> <p>c. Integrated heating arrangement up to 150 ± 2 °C with closed loop temperature control.</p> <p>d. Shall be able to evenly hold and heat various size substrates restricted to plate size.</p>	Yes / No / Explain		

24	System control platform: Control platform shall have these features:	<ul style="list-style-type: none"> a. Graphical user interface b. Teach mode, preferably with laser pointer, for precise setting of job/coating area. c. Dry mode to verify the translation of setting from laser mode settings into actual spray head movement d. Programmable options for Spray head cleaning and purging e. 90-degree spray head rotate within 0.5 second, for criss-cross multi-layer coating application 	Yes / No / Explain		
25	System software:	The application software shall have following features:	Yes / No / Explain		
26	Operation Mode/Features:	<ul style="list-style-type: none"> a. Teach mode: with laser pointer for coating area verification b. Dry run Mode : without laser and without spray over coating area c. Run Mode: spraying coating mode d. Coating material filling, refilling e. Recovery and cleaning of coating unit 	Yes / No / Explain		

27	Programming Features:	<ul style="list-style-type: none"> a. Coating area selection assisted by laser pointer b. Coating area selection with point/line coordinates c. Coating liquid flow rate d. Spray Head mode (narrow or wide) e. Spray Head speed f. Spray Head height g. Head rotate option (90° or 0°) h. Air pressure to spray head i. Spray Head auto cleaning and purging option prior to spraying j. Head clean – mid coating recipe as required k. Wait/hold time (required dry time between coating layers) l. Stirring speed, direction and time m. Automatic pump refill volume 	Yes / No / Explain		
28	Alarms and system status:	<ul style="list-style-type: none"> a. Low system exhausts interlock with bypass mode b. Ultrasonic fault error message & interlock c. X-Y motion fault message & interlock d. Low holding reservoir level alarm e. Empty pump level message & interlock f. Current volume in pump - display g. Coating volume used in recipe – display 	Yes / No / Explain		

Document : detailed specifications of coating machine

Supporting Documents required from Vendor

1. list of customers to whom nozzlefree ultrasnic coating machine is supplied by the manufacturer.

2. detailed technical specification sheet for the item

3. UNPRICED BID showing the split-up of main equipment, accessories, essential spares as applicable

4. Detailed Techno-Commercial Offer (without Price Details)

5. UNPRICED AMC Quote in Split-Up format for each year required.

6. UNPRICED LIST of Essential/Optional Spares for 7 years Maintenance

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

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

9. 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	1. Party shall provide a detailed list of spares. Separate cost split up shall be given for all the subsystems and spares. Shelf life of the spares, if any applicable, shall be clearly mentioned.	Yes / No / Explain	
2	2. Manufacturer's letter of authorization / certificate shall be submitted by the supplier.	Yes / No / Explain	
3	3. All relevant operation, maintenance and calibration manuals and circuit diagrams, in English, shall be supplied along with the machine.	Yes / No / Explain	
4	4. Supplier shall submit all documents including test reports and test certificates with respect to design, materials, fabrication, testing, etc. for pre-delivery inspection at manufacture's site.	Yes / No / Explain	
5	5. Pre-delivery inspection shall be decided by VSSC and same shall not be mandatory made by the party for dispatching the equipment.	Yes / No / Explain	
6	6. Supplier shall be responsible for installation commissioning of the equipment at our site.	Yes / No / Explain	
7	7. Detailed training shall be given to VSSC personnel by service engineer for operation and basic maintenance and calibration of the system at VSSC.	Yes / No / Explain	
8	8. Scope of the training in terms of number of hours/days and content shall be detailed in the offer.	Yes / No / Explain	
9	9. The offer shall provide a scheme for updating of the application software, whenever there is an update.	Yes / No / Explain	
10	10. The equipment shall have minimum three years warranty and 7 years annual maintenance contract after warranty period.	Yes / No / Explain	
11	11. Party shall provide separate AMC offer for 7 years after warranty period. AMC offer shall be non-comprehensive and charges per maintenance visit shall be clearly mentioned in the offer.	Yes / No / Explain	

12	12.A clear scheme for carrying out periodic preventive maintenance by service engineer during warranty, and beyond warranty period under an AMC, shall be provided in the relevant offer.	Yes / No / Explain	
13	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	
14	Payment Term: (Our Defalut 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	
15	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	
16	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	
17	Delivery Period	Yes / No / Explain	

18	PO Placement Address (with Name and Contact Details of sales person concerned).	-	
19	Delivery Terms.	Yes / No / Explain	
20	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	
21	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	
22	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	
23	Any Other Terms	Yes / No / Explain	
24	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	
25	Warranty(for 7 years) CONFIRM	Yes / No / Explain	

26	Acceptance to provide Non-Comprehensive AMC for a period of 7 yrs after the completion of warranty period. AMC cost shall only be mentioned in the specific slot in the price bid.	Yes / No / Explain	
27	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	
28	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	
29	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	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Nozzle Free Ultrasonic Coating Machine	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	