

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (IIST)
THIRUVANANTHAPURAM**

Tender for Planetary ball mill

Bids to be submitted online

Tender No.: IIST/PURCHASE AND STORES/IN202400030401 dated 06-06-2024

A. Tender Details

Tender No : **IIST/PURCHASE AND STORES/IN202400030401**

Tender Date : **06-06-2024**

Tender Classification: **GOODS**

Purchase Entity : **PURCHASE AND STORES**

Centre : **INDIAN INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (IIST)**

Supply, Installation and Training of Planetary Ball Mill

Supply, Installation and Training of Planetary Ball Mill

A.1 Tender Schedule

Bid Submission Start Date : **06-06-2024 15:00**

Bid Clarification Due Date : **12-06-2024 11:00**

Bid Submission Due Date : **04-07-2024 14:00**

Bid Opening Date : **04-07-2024 14:15**

Price Bid Opening Date : **23-07-2024 14:00**

B. Tender Attachments

NA

Instructions To Vendors

1. Instruction to Tenderers along with Terms and Conditions

1. This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted. Quotation/Open Authorization shall be submitted online [only] complying the specified schedule with technical specifications, including pamphlets and catalogues.

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

3. Foreign vendors are permitted to quote. The FOB/FCA Value, the C& F value for import by Sea Freight/ Air Freight upto and for shall be clearly indicated in the quote.

4. 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.

5. The vendor have to compulsorily submit the compliance statement online otherwise their offer will not be considered for further evaluation. Before entering the compliance statement, vendors are advised to refer the detailed specification provided.

6. The Technical Specification/ Drawing/ Product Catalogues/ Works Carried by vendor/ Make offered etc. as a single PDF file without any financial details has to be uploaded online mode by the vendor.

7. Last minute clarification on tenders will not be entertained.

8. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.

9. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer. Micro and Small Vendors are not exempted from the submission of Security Deposit.
10. Our standard delivery term is FOR, IIST. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.
11. Our standard payment term is 100% within 30 days for indigenous orders and 100% TT within 30 days Sight Draft for foreign orders
12. Please upload the Technical Details / Catalogue / Data Sheets (wherever applicable)
13. As far as possible the shipments should be dispatched through our designated freight forwarder
14. Security Deposit : - Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @3 % of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations.
15. The offer should be valid for a period of minimum 180 days [for Two Part Tender] from the date of Tender opening.
16. The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific terms will prevail over the standard terms.
17. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.
18. ARBITRATION - In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre Bengaluru (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be

determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be in English only. Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the DEPARTMENT or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.

19. Liquidated damages: The delivery period quoted by you and stipulated in the Purchase Order shall be deemed to be the essence of the order and delivery must be completed not later than the dates specified therein as otherwise IIST shall have the right to recover a sum @ 0.5% of the order value per week/part of a week or 0.5% of the value of the stores for which the delivery is delayed for each week of delay, as the case may be, subject to a maximum of 10% of the order value.

20. 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. Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

21. All Tax invoices issued by suppliers/Service providers on or after July 01, 2017 shall invariably bear their GST Registration No.(GSTIN) applicable GST rates and HSN Code. In the absence of which, the invoices shall not be processed for payment.- In case of Indigenous Suppliers

22. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws

23. Warranty: Warranty (No. of Years) should be clearly indicated in the quotation. Warranty will be from the date of installation

24. Performance Bank Guarantee: You shall furnish performance Bank Guarantee in Rs.200/-non judicial stamp paper from a Nationalized/Scheduled Bank Equivalent to 3% of the order value which shall be valid beyond 2 months from the expiry of warranty/guarantee period.

25. If you are unable to submit offer, the same may be communicated to us before the due date.

26. IIST has a right to cancel the tender without assigning any reason etc.

27. We would like to have more than one source of supply and the final orders will be given accordingly to the qualified bidders

28. The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific

terms will prevail over the standard terms.

29. Note: SD, LD and PBG clauses are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit. Only Govt Departments/PSUs/PSEs can submit Indemnity Bond instead of Bank Gurantee towards SD/PBG.

30. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

31. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

32. Tax and or other duties or levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes and duties.

33. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued

by Govt. of India from time to time with a view to support the Indian industries, ISRO/IIST has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier"

for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-

34. a) The subject item falls under Non-divisible category. b) The offers are sought from all classes of suppliers. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: i. Equal to or more than 50%: Class-I local supplier. ii. More than 20% but less than 50%: Class-II local supplier. iii. Less than or equal to 20% Non local supplier

35. 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. The margin of Purchase Preference shall be up to 20%. Margin of purchase preference means the maximum extent to which the price quoted by the Class-I local supplier above the L1 (landed cost).L1 means the lowest technically accepted tender / bid / quotation i.e. lowest landed cost including duties, taxes and freight & Insurance.

36. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services: a) If L1 is from a Class-I local supplier, the contract will be awarded to L1 bidder. b) If L1 is not from a Class-I local supplier, the lowest bidder among the Class-I local supplier will be invited to match the L1 price subject to local suppliers quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such Class-I local supplier subject to matching the L1 price (inclusive of duties, taxes and freight & insurance). c) In case such lowest eligible Class-I local supplier fails to match the L1 price, 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 order/contract shall be awarded accordingly. In case where none of the Class-I local supplier within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

37. The Class-I & II local supplier should provide a Self Certification along with technical offer indicating that the item offered meets the minimum local content as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to MLC(minimum Local Content) in technical bid zone

C. Bid Templates

C.1 Technical Bid - Planetary ball mill

1. PLANETARY BALL MILL-with accessories

Item specifications for PLANETARY BALL MILL

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Item	A planetary ball mill to grind coarse organic/inorganic materials and metallic powder samples of ≤10 mm to nano size (≤ 0. 1 μm) particles in wet and dry grinding method.	Yes / No / Explain		
2	Type	Bench top compact model, with two grinding stations	Yes / No / Explain		
3	Number of working stations	2	Yes / No / Explain		
4	Maximum feed particle size	≤10 mm	Yes / No / Explain		
5	Grinding process	Dry and wet grinding should be possible	Yes / No / Explain		
6	Minimum sample quantity	~1 ml	Yes / No / Explain		
7	Rotational Speed of main disk	Minimum 150 rpm or lower – Maximum 650 rpm or higher	Yes / No / Explain		
8	Speed adjustment and controls	Rotational speed regulated by microprocessor	Yes / No / Explain		
9	Mixing duration	Adjustable timer control with display in minutes	Yes / No / Explain		
10	Final powder fineness	≤ 0. 1 μm	Yes / No / Explain		
11	Supply requirements	200 - 240 V, 50-60Hz , Single phase	Yes / No / Explain		

12	Micro Mill Specifications	<ul style="list-style-type: none"> •The mill shall be equipped with adjustable acceleration sensor for sensitive imbalance control •Provision for Grinding in inert/other gas atmosphere should be available •Proper mechanism shall be provided to compensate all unbalance of grinding bowls •Shall have the facility of continually monitoring and recording the data of gas pressure and temperature during the grinding process •Lock-system and/or special lid for grinding in inert atmosphere •No-loss grinding, even in suspension shall be ensured •The wheel diameter and wheel speeds stipulated to get speed of the jar up to 650 min-1 or better •Provision for digital grinding time setting in the range of 00:00 to 99:00 hrs with a minimum step increment of 1 minute or better •Provision for digital grinding time setting in the range of 00:00 to 99:00 hrs with a minimum step increment of 1 minute or better •Safety provision to ensure that the mill can only be started after all grinding jars have been securely fixed with the clamping device •Self-acting lock to ensure the sealing of grinding jars correctly and securely •Synchronous 	Yes / No / Explain		
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		<p>toothed belt drive of the bowls shall be provided to guarantee a slip-free and constant transmission ratio between the bowls and main disc</p> <ul style="list-style-type: none"> •In built cooling system/fan for the grinding chamber shall be provided to permit long duration grinding operations •Programmable interval, break times and rotation direction (clock wise & anti-clock wise) shall be provided •Absolutely reproducible grinding parameters with use of synchronous belts for transmission 			
13	No. of bowls & Capacity	<p>(i)2 numbers of bowls of ~80 ml made of Zirconium oxide. (ii)2 numbers of bowls of ~50 ml made of Zirconium oxide. (iii)2 numbers of bowls of ~80 ml made of Si3N4.</p> <p>Variation of ~20 % in the bowl size is acceptable Composition details of the bowl should be mentioned</p>	Yes / No / Explain		
14	Bowl material	<ul style="list-style-type: none"> •Elemental composition: - For bowls in 13 (i) and (ii) Zirconium oxide: $\geq 94\%$ For bowls in 13 (iii) Si3 N4: $\geq 90\%$ •The grinding bowls should be supplied with steel casing 	Yes / No / Explain		

15	Grinding balls	Material: Spherical Magnesium/Yttria stabilized zirconia grinding balls of following dimensions. Material test certificate may be provided. Grinding balls of (i)Diameter: 15 mm, Quantity: 10 nos (ii)Diameter: 10 mm, Quantity: 50 nos (iii)Diameter: 5 mm, Quantity: 100 nos	Yes / No / Explain		
16	Safety features	•Safe lock clamping system for the bowls shall be provided •Suitable safety interlock & overload protection with automatic rotational speed adjustment and display shall be provided	Yes / No / Explain		
17	Control Panel	Control panel shall have provisions for: •ON/OFF switches •Power indication •Touch panel display screen	Yes / No / Explain		
18	Display parameters	•Running time display (Time remaining) in 00:00 (Hour: Minute) format. •RPM display	Yes / No / Explain		
19	Warranty	Party shall provide minimum one year warranty from the date of installation and commissioning of the machine at our site.	Yes / No / Explain		
20	Additional features	Auto-resume feature in case of power-failure	Yes / No / Explain		
21	Spares	Teflon rings or Washers-12 Nos. Spare Silicone rings-8 Nos.	Yes / No / Explain		

22	Warranty and Annual Maintenance Contract	One-year extended warranty and Annual Maintenance Contract (AMC) for three years after warranty period with number of preventive and breakdown visits should be quoted separately.	Yes / No / Explain		
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23	General conditions	<p>1. Vendor should attach a brochure with the images and exact dimensions and price of the product</p> <p>2. Price of each item, wherever applicable, should be quoted separately.</p> <p>3. Quotation shall clearly spell out conformity to our requirements with details and any deviations shall be mentioned.</p> <p>4. A Compliance statement shall be provided against each indent specification.</p> <p>5. Actual offer specification by the party shall be stated in the compliance statement.</p> <p>6. If required, a Suitable anti-vibration table which can withstand the equipment weight and vibration shall be quoted with specs, if not required, reasons shall be mentioned, description in the brochure is preferable.</p> <p>7. Delivery Time required should be mentioned and should not exceed 5 months.</p> <p>8. List of essential spares and consumables for trouble-free operation shall be quoted separately along with the offer.</p> <p>9. Party shall install the equipment at our site and demonstrate the performance</p> <p>10. Composition Analysis certificate of</p>	Yes / No / Explain		
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the grinding bowl & ball shall be provided along with the equipment.

11. The mill should be CE certified

12. Supplier should ensure availability of all components and consumables for a minimum period of 10 years from date of installation and commissioning of the machine at IIST

13. Equipment shall be supplied in plug-in and ready to use condition.

14. The equipment shall be properly packed and instructions for handling shall be clearly marked / indicated. All the moving parts shall be properly secured to eliminate any damage during transit

15. Instruction for troubleshooting and operator's manual shall be provided.

16. List of Users in India with detailed address should be provided.

17. All document should be in English language.

18. Operation and functioning of all modes of the system of the machine are to be demonstrated by the supplier.

19. Adequate training to be provided to IIST personnel. Focus of training shall be both on operation and maintenance (mechanical & electrical) of the

		machine.			
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Supporting Documents required from Vendor

1. Specifications and details of product & components. Compliance sheet must be provided.

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Onsite supply and installation & training at the site	Yes / No / Explain	
2	Foreign vendors are permitted to quote 1. Class -I and Class-II Local suppliers as per make in India policy can participate in the bid. 2. The percentage of local content should be specifically mentioned in the offer, without which will be summarily rejected 3. Preference will be given to class-I Local Supplier and in their absence, L1 will be considered.	Yes / No / Explain	
3	I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.	Yes / No / Explain	
4	Foreign Principals pro-forma invoice indicating the commission payable to the Indian Agent and nature of after sales service to be rendered by the Indian Agent.	Yes / No / Explain	
5	Copy of Agency agreement with the Foreign Principal, precise relationship between them and their mutual interest in the business.	Yes / No / Explain	
6	The enlistment of the Indian Agent with Director-General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.	Yes / No / Explain	
7	P & F charges, if any, please mention percentage.	Yes / No / Explain	
8	Installation Charges, if any	Yes / No / Explain	
9	Freight charges, if any. If yes ,please mention the percentage	Yes / No / Explain	
10	PO ordering address in full with Contact Persons Name, E-mail id, Phone No. [also attach your Quotation in PDF format].	Yes / No / Explain	

11	You should update the address of your Principal/ agent [if applicable] in the new E procurement portal immediately .	Yes / No / Explain	
12	Taxes and other costs, if any. [Please Specify the rates]. Note: All Tax invoices issued by suppliers/service providers on or after July 01, 2017 shall invariably bear their GST registration number (GSTIN) and the applicable GST rates. In the absence of which, the invoices shall not be processed for payment.	Yes / No / Explain	
13	Warranty [Minimum One year from the date of Installation required.]	Yes / No / Explain	
14	Delivery Terms [Normal delivery terms - FOR Destination (for Indigenous cases) & FOB/ FCA or Ex-works (for Import cases).	Yes / No / Explain	
15	Delivery Period [Please Specify the period, LD Clause applicable]	Yes / No / Explain	
16	Payment [Within 30 days after receipt and acceptance for indigenous/ Sight Draft for import cases].	Yes / No / Explain	
17	Quote Validity: Minimum 90 days [for Single Part Tender]/180 days [for Two Part Tender].	Yes / No / Explain	
18	3% Performance Bank Guarantee valid two months beyond warranty period to be provided.	Yes / No / Explain	
19	Liquidated Damages @ 0.5% per week subject to maximum of 10% of order value is applicable beyond the promised delivery schedule.	Yes / No / Explain	
20	Security Deposit: Successful Tenderer shall submit Security Deposit equivalent to 3% of the order value valid for a period of 60 days beyond the date for completion of the Purchase Order shall be furnished. This security deposit is collected towards the performance of the Contract. The said Security Deposit shall be submitted either in the form of Bank Guarantee or Fixed Deposit receipts from Nationalised/Scheduled Banks.	Yes / No / Explain	
21	Please quote exact GST% as per the latest Govt. Orders.	Yes / No / Explain	
22	Please mention the acceptance of partial/split orders without alteration in the terms and conditions of the quote	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Packing and Forwarding	Remark
1	PLANETARY BALL MILL-with accessories	1.00 Nos.		-			