# Domestic Tender notification for the supply of the soldering station at the Packaging and Systems Facility, CeNSE (Last date: 27<sup>th</sup> November 2024)

This is an RFQ (Request for Quote) for the supply of the soldering station at the Packaging and Systems Facility, Centre for Nano Science and Engineering (CeNSE) at the Indian Institute of Science (IISC), Bangalore.

- 1. The Bidder should belong to either Class-1 or Class-2 suppliers distinguished by their "local content" as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. a) Class-1 supplier: Goods and services should have local content of equal to or more than 50%. b) Class-2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
- 2. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
- 3. The quotations should be on FOR-IISc Bangalore basis in INR only.
- 4. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
- 5. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.
- 6. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

1	Section 1	Bid Schedule		
2	Section 2	Eligibility Criteria	As specified by IISc	
3	Section 3	Terms and	As specified by IISc	
		conditions		
4	Section 4	Technical	As specified by IISc	
		Specifications		
5	Section 5	Technical Bid	Annexure 1: Details of the Bidder	
			Annexure 2: Declaration regarding experience	
			Annexure 3: Declaration regarding track record	
			Annexure 4: Declaration for acceptance of terms and	
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			Annexure 5: Details of items quoted	
6	Section 6	Commercial Bid	Quotation with Price, Technical specifications of the	
			equipment	
7	Section 7	Check List		

### **Section 1- Bid Schedule**

1	Tender No	CeNSE/RFQ/SG/10/2024
2	Tender Date	6 <sup>th</sup> November 2024
3	Item Description	Supply of the soldering station, which will be used for the integration and packaging of PC Boards.
4	Tender Type	Two bid system Technical Bid (Part A) Commercial Bid (Part B)
5	Place of tender submission	Chairperson Office, Attn: Prof. Prosenjit Sen Centre for Nano Science and Engineering Indian Institute of Science, Bangalore 560012
6	The Last Date and Time for submission of the tender	27 <sup>th</sup> November 2024
7	For further clarification	Prosenjit Sen Associate Professor Centre for Nano Science and Engineering Indian Institute of Science Bangalore – 560012, India. Email: prosenjits@iisc.ac.in

### Section 2 – Eligibility Criteria

### Prequalification criteria:

- 1. The order will be placed only on the bidder who participated in the bid. The Bidder's firm should have existed for a minimum of 1 year. (Enclosed Company Registration Certificate).
- 2. The Bidder should have qualified technical service personnel for the instrument(s) based in India.
- 3. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per Annexure 4.
- 4. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect must be given as per Annexure 3.

### **Section 3 – Terms and Conditions**

# A. Submission of Tender:

- 1. All documentation in the tender should be in English.
- 2. Tenders should be submitted in two envelopes (two bid systems).
  - a. **Technical Bid (Part-A)** The technical bid consists of all technical details and a checklist for technical specifications. The technical bid **must not contain** any price information. The technical proposal should include a technical compliance table with five columns. The first column must list the technical requirements in the order given in the technical specifications below. The second column should provide instrument specifications against the requirement. Please provide

quantitative responses wherever possible. The third column should describe your compliance with a "YES" or "NO" only. Ensure that the entries in column 2 and column 3 are consistent. The fourth column should state the reasons/explanations/context for deviations, if any. The fifth column can contain additional remarks from the Indian Original Equipment Manufacturer (OEM) or their distributors. You can use this opportunity to highlight technical features, qualify responses of previous columns, provide additional details, compare your solution with your competitors, or provide details as requested in the technical requirements table below. Any additional capabilities or technical details you would like to bring to the attention of the purchase committee can be listed at the end of the technical table. Tender documents must have technical compliance documents to be considered. Technical capabilities of any suggested accessories/add-ons that may enhance the usability, capability, accuracy, or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors. Items, in addition to those listed in the technical table that the vendor would like to bring to the attention, such as data sheets, technical plots, etc., can be listed at the end of the compliance table. Vendors are also encouraged to highlight the advantage of their tools over comparable tools from the competitors. The technical proposal will be evaluated against the technical requirement. Deviations from the technical specifications requested are allowed. Such deviations must be highlighted and justified. Their acceptance or rejection will be left to the discretion of the technical committee. Only the vendors adjudged by the committee to be suitable to meet the technical requirements will be considered for the commercial negotiation.

- b. Commercial Bid (Part-B) Indicating item-wise price for the items mentioned in the technical bid, as per the format of quotation provided in the tender, and other commercial terms and conditions. The commercial bid should contain the Itemized cost of the system and required accessories, such as software, power supply, etc. All accessories needed for the instrument to function as per the technical specification must be listed. Itemized cost, as an option, for any suggested accessories/add-ons that may enhance the usability, capability, accuracy, or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits. Please indicate the warranty provided with the tool. A warranty of 1 year or more is preferred. Provide itemized cost for required/expected spares for 1 year of operation. For the sake of this calculation, the vendor may assume active tool usage of 40 hours/week. This number will be used to estimate the life cycle cost of the tool. The cost of an annual maintenance contract (AMC). The details of AMC are given below. This number will be used to estimate the life cycle cost of the tool. Length of time that the tools will be supported with service and spares from the date of installation. Our requirement is that the tools be supported for at least 4 years from the date of installation. To quote the lowest price, vendors often quote for obsolete or soon-to-be obsolete equipment. This is NOT acceptable. For a user facility like CeNSE, it is vital that the equipment be serviceable and supported in the foreseeable future. The length of guaranteed support will be used to estimate the life cycle cost of the tool. The commercial bid should indicate the following separately: equipment price, optional items, Freight and insurance cost, Shipping cost, and the Total cost. The quotations should be in INR only.
- 3. The technical bid and commercial bid should be placed in separate sealed covers, superscripting the tender no. and the due date on both envelopes. These sealed covers should be placed in a bigger cover, which should be sealed and duly superscripted with the Tender No, Tender Description, and Due Date.

- 4. The SEALED COVER superscripting tender number / due date and should reach the Chairperson Office, Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore 560012, India, on or before the due date mentioned in the tender notice. If the due date is a holiday, the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
- 5. All queries are to be addressed to the person identified in "Section 1 Bid Schedule" of the tender notice.
- 6. GST/other taxes, levies, etc., should be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document (Indian Bidders only).
- 7. The bid will only be accepted if the price is quoted in the Commercial Bid as per the format provided in the tender document.
- 8. The vendor should have qualified technical service personnel for the equipment based in India and assure a response time of <48 hours.
- 9. The technical proposal must include references of at least three previous installations done in India within the last five years of similar equipment from the manufacturer. Please provide the names and contact addresses of the three independent referees so the committee can contact them independently to get references. Please provide the installation report.
- 10. A pre-tender meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
- 11. A technical evaluation by the purchase committee may include a demonstration to verify the functionalities and capabilities of the system quoted. The purchase committee reserves the right to reject the bids based on their technical evaluation of the quality of data, capability demonstration, and service. The bid will be rejected if the data/requested capability demonstration does not happen within a stipulated timeframe. Any discrepancy between the promised specifications and measurements will be deemed as technical non-compliance. All components and accessories indicate component-wise and itemized breakup. Provide certificates for the country of origin of manufacturing for each line item. The price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (installed and ready to use) in our facility.
- 12. The purchase committee reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time before the award of the contract without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
- 13. Incomplete bids will be summarily rejected.
- 14. The decision of the purchase committee will be final.

### **B.** Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

- 1. To accept OR reject the lowest tender or any other tender or all the tenders.
- 2. To accept any tender in full or in part.
- 3. To reject the tender, offer not confirming to the tender terms.

### C. Validity of the offer:

The offer shall be valid 90 Days from the commercial bid's opening date.

#### D. Evaluation of the offer:

- 1. The technical bid (Part A) will be opened first and evaluated.
- 2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
- 3. Pre-qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision regarding acceptance and/or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and the decision in this regard shall be binding on the bidders.
- 4. The contract award will be subject to acceptance of the terms and conditions stated in this tender.
- 5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
  - a. Non-submission of complete offers.
  - b. Receipt of bids after due date and time and or by email/fax (unless specified otherwise).
  - c. Receipt of bids in open conditions.
- In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender, and no further claim will be entertained.
- 7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
- 8. The lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, pre-processing and post-processing, optional items, recommended spares, warranty, and annual maintenance contract.

### E. Pre-requisites:

The bidder will provide the equipment's prerequisite installation requirements along with the technical bid.

### F. Warranty:

The complete system is to be under a minimum warranty period of 1 year, including a free supply of spare parts and software from the date of functional installation. The vendor should include the cost of any spares that are expected to be needed during the warranty period, including electronics, subcomponents, and software. If the instrument is found to be defective, it must be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

### **G.** Annual Maintenance Contract (AMC)

An annual maintenance contract for a period of 3 years post warranty should be provided on completion of the warranty period. If this is not possible, ample justification is needed.

### H. Purchase Order:

- 1. The order will be placed on the bidder whose bid is accepted by IISc Bangalore based on the terms and conditions mentioned in the tender document.
- 2. The quantity of the items in the tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.

- 3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.
- 4. After the award of the purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order

### I. Delivery, Installation, and Training:

- 1. The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore, from the date of receipt of the purchase order.
- 2. The system should be delivered, installed, and made functional **within three months** from the date of receipt of the purchase order.
- 3. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore.
- 4. After successful installation and inspection, the date of taking over of the entire system by the IISc, Bangalore, shall be taken as the start of the warranty period.
- 5. No partial shipment is allowed.
- 6. The bidder should provide onsite application training for the local facility technologists and users. The bidder should also arrange technical training for the local facility technologists and users.
- 7. As an option, please provide itemized costs for any suggested accessories/add-ons that may enhance the usability, capability, accuracy, or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits under the optional items.
- 8. Clarify if periodic (preventive) maintenance be done by a trained on-site engineer or requires a specialist from the OEM.
- 9. If maintenance requires OEM, as an additional option, provide the cost of an annual maintenance contract (AMC) for three years, post-warranty. The AMC must cover one scheduled and one emergency visit per year. It must also indicate who will service the AMC, whether it is an Indian agent or the OEM. The AMC cost must also include an itemized list of spares that are essential for the scheduled visits.
- 10. Spare parts of the system must be available for at least seven years.

### J. Payment Terms:

The payment will be through a Letter of Credit, and the milestone of the payment will be determined after mutual discussions with the successful bidder

### **K.** Statutory Variation:

Any statutory increase in the taxes and duties subsequent to the bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore, subject to the claim being supported by documentary evidence. However, if any decrease takes place, the advantage will have to be passed on to IISc, Bangalore.

### L. Dispute and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

### M. Performance Security:

On award of the Purchase Order, the successful bidder shall submit Performance Security along with the equipment for 3% of the Purchase Order value through Bank Guarantee or Fixed Deposit. The Performance Security shall be released after the warranty period.

### N. General:

- 1. All amendments, time extensions, clarifications, etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.
- 2. The bidder may furnish any additional information that is necessary to establish capabilities to successfully complete the envisaged work. It is, however, advised not to furnish superfluous information.
- 3. The bidder may visit the installation site before submission of the tender, with prior intimation.
- 4. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

### **Section 4 - Technical specifications**

### A. Solder Paste Mixer

SI. No	Specification		Essential/Optional
1.	Quantity	1	Essential
2.	Speed	1350 RPM	Essential
3.	Capability	0~500 g * 2 Tanks	Essential
4.	Power Source	AC 220V ± 10% 50Hz	Essential

### **B.** Solder Paste Printer

SI. No	Specification		Essential/Optional
1.	Quantity	1	Essential
2.	Size of Workbench	320 x 500 mm	Essential
3.	Printing Size	320 x 450 mm	Essential
4.	Stencil Size	920 x 576 mm	Essential
5.	Repeated Precision	±0.05 mm	Essential
6.	Power Source	AC 220V ± 10% 50Hz	Essential
7.	Work Altitude	130 mm	Essential

### C. Automatic Pick and Place Machine

SI. No		Specification	Essential/Optional
1.	Quantity	1	Essential
2.	Feeder Slots	66	Essential
3.	Number of Mounting	6	Essential
	Heads		
4.	PCB Size	500 x 400 mm	Essential
5.	Applicable	0402, 0603, 0508,1206, SOT, QFN 40x40	Essential
	Components	mm, 0.4mm lead pitch, BGA 40x40 mm,	
		0.5mm Ball pitch, LED-0603, 0805, 3014,	
		5050	
6.	Positioning Accuracy	0.02 mm	Essential
7.	Normal CPH	8000 to 10000	Essential

8.	Control Configuration	Industrial Computer + Display Screen	Essential
9.	Compatible	Pick-up Nozzle (Quantity: 15)	Essential
	Accessories	Component feeders 8mm (Quantity: 10)	Essential
		Component feeders 12mm (Quantity: 5)	
		Component feeders 16mm (Quantity: 5)	Essential
		Component feeders 24mm (Quantity: 2)	
		Pneumatic Air Compressor, if needed	Essential
		(Oil Free)	
		Camera and any other accessories for	Essential
		the equipment functionality	
			Essential
			Optional
10.	Compatible file format	GERBER file	Essential

# D. Reflow Oven

SI. No		Specification	Essential/Optional
1.	Quantity	1	Essential
2.	Heat Zone Numbers	6 Zones (Up 3 + Down 3)	Essential
3.	Length of Heating	1060 mm	Essential
	Zones		
4.	Temperature	Indoor Temperature ~ 400 Degrees	Essential
5.	Height of Net Belt	300 ± 20 mm	Essential
6.	Input Supply Power	AC 220V ± 10% 50Hz	Essential
7.	Outline Size	L2100 x W680 x H1200 mm	Essential
8.	Width of Net Belt	300 mm	Essential
9.	Allow PCB Height	<20 mm	Essential
10.	Transit Time	3.5~5.5 mins	Essential
11.	Cooling Zone Numbers	2 Natural Cooling	Essential
12.	Allow PCB width	280 mm	Essential
13.	Transport Speed	0~1350 mm/min	Essential
14.	Heating time	15~20 mins	Essential

# E. Linking and Inspection Conveyor

SI. No	Specification		Essential/Optional
1.	Quantity	2	Essential
2.	Length	1	Essential
3.	Width and Height	Should be compatible with other equipment in this document	Essential
4.	Camera with Display		Optional
5.	Optical Microscope		Optional

# Section 5 - Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and be submitted to

The Chairperson,
Attn: Prof. Prosenjit Sen
Centre for Nano Science and Engineering
Indian Institute of Science
Bangalore – 560012, India
Email: prosenjits@iisc.ac.in

# Annexure-1:

# **Details of the Bidder**

The bidder must provide the following mandatory information and attach supporting documents wherever mentioned:

Details of the Bidder

SI No.	Items	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License (attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact Person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

Signature of the Bidder	
Name Designation, Seal	Date:

# Annexure-2:

# **Declaration regarding experience**

To,	
The Chairperson,	
Centre for Nanoscience and Engineering,	
Indian Institute of Science,	
Bangalore – 560012, India	
Ref: Tender No:	
Dated:	
Supply of the soldering station at CeNSE, IISc Bangalore.	
Sir/Madam	
Sir/Madam,	. the above veterred tender I because.
I've carefully gone through the Terms and Conditions contained in	•
declare that my company/firm hasyears of experience in	supplying and installing
(Signature of the Bidder)	<del>.</del>
(Signature of the Bidder)	
Name	D. L.
Designation, Seal	Date:

### Annexure-3:

### **Declaration regarding track record**

To,
The Chairperson,
Centre for Nano Science and Engineering
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No:

Dated:

Supply of the soldering station at CeNSE, IISc Bangalore

### Sir/Madam,

I've carefully gone through the Terms and Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I'm a competent officer in my company/firm to make this declaration.

Or

### I declare the following

SI. No	Country in which the company is Debarred /blacklisted / case is Pending	Blacklisted/debarred by Government / Semi Government/Organizations /Institutions	Reason	Since when and for how long

(NOTE: In case the company/firm was blacklisted previously, please provide the details regarding the period for which the company/firm was blacklisted and the reason/s for the same).

Yours faithfully	
(Signature of the Bidder)	
Name	
Designation, Seal	Date:

# Annexure – 4:

# **Declaration for acceptance of terms and conditions**

The Chairperson, Centre for Nano Science and Engineering Indian Institute of Science,	
Bangalore – 560012, India	
Ref: Tender No: Dated:	
Supply of the soldering station at CeNSE, IISc Bangalore.	
Sir/Madam, I've carefully reviewed the Terms and Conditions mentioned in the declare that all the provisions of this tender document are acceptable to I'm an authorized signatory of my company and am, therefore, compet	to my company. I further certify that
Yours faithfully, (Signature of the Bidder) Name	
Designation, Seal	Date:

### Annexure – 5:

# Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part / Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks

### Instructions to bidders:

- 1. Bidder should provide detailed technical specifications of the quoted product/s.
- 2. The bidder should attach product brochures along with the technical bid.
- 3. Bidders should indicate compliance or non-compliance with the technical specifications in the tender document.

# <u>Section 6 – Commercial Bid</u>

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1	Essential items noted in the technical specification				
1. a	(details of essential items)				
1. b					
2	Optional items noted in the technical specification				
2. a	(details of essential items)				
2. b					
3	Accessories for operation and installation				
4	All Consumables, spares, and software are to be supplied locally.				
5	Warranty (1 year)				
6	AMC 3 years beyond warranty				

# Any additional items

SI. No	Description	Cat.	Number	Unit Price	Subtotal
			Quantity		

Addressed to
The Chairperson,
Attn: Prof. Prosenjit Sen
Centre for Nano Science and Engineering
Indian Institute of Science

Bangalore – 560012, India Email: <a href="mailto:prosenjits@iisc.ac.in">prosenjits@iisc.ac.in</a>

### Section 7 – Checklist

(This should be enclosed with a technical bid- Part A)

The following items must be checked before the Bid is submitted:

### A. Sealed Envelope "A": Technical Bid

- 1. Section 5- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:
  - a. Annexure 1: Bidders details
  - b. Annexure 2: Declaration regarding experience
  - c. Annexure 3: Declaration regarding clean track record
  - d. Annexure 4: Declaration for acceptance of terms and conditions
  - e. Annexure 5: Details of items quoted
- 2. A copy of this tender document duly signed by the authorized signatory on every page and sealed.

### B. Sealed Envelop "B": Commercial Bid

Section 6: Commercial Bid

Your quotation must be submitted in two envelopes: **Technical Bid (Envelope A) and Commercial Bid (Envelope B)** superscripting on both the envelopes with Tender No. And due date. Both of these are in sealed covers and put in a bigger cover, which should also be sealed and duly superscripted with Tender No., Tender description, and Due Date.

Thanking you,
Prof. Prosenjit Sen
Associate Professor
Centre for Nano Science and Engineering
Indian Institute of Science, Bangalore, India 560012.

E-mail: prosenjits@iisc.ac.in