



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित
सैक्टर 81, नॉलेज सिटी, प. ओ. मनोली, एस. ए. एस. नगर, मोहाली, पंजाब 140306
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI
(Established by Ministry of Education, Govt. of India)
Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab
PAN No. - AAAAI1781K GSTIN – 03AAAAI1781K2ZS

• Phone : +91-172- 2240121 • Fax : +91-172-2240124 • <http://www.iisermohali.ac.in> • Email: stores@iisermohali.ac.in

CPPP/Institute Website

IISERM (1480)21/22-Pur

Dated: 13th July 2021

NOTICE INVITING E-TENDER

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply and Installation of Semi-Automatic Ultrasonic wedge bonder for wires and ribbons and accessories** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website www.iisermohali.ac.in.

-Sd-

Assistant Registrar (P&S)

NOTE: This is a domestic Tender according to the DPIIT Order dated 15/07/2017 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. The bidder required to declare on the letter head the percentage of Local content for the quoted instrument and submit with the Technical Bid. Bidder should also give details of the location(s) at which the local value addition is made



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E-TENDER NOTICE

Tender Ref.- IISERM(1480)21/22-Pur	Dated : 13 th July 2021
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Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	13 th July 2021	6:00pm
2.	Tender Document download start Date & Time	13 th July 2021	6:00pm
3.	Bid Submission start Date & Time	13 th July 2021	6:00pm
4.	Bid Submission End date and Time	3 rd August 2021	Upto 11:00am
5.	Tender opening Date and Time	4 th August 2021	At 11:30am

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for following item(s) from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website www.iisermohali.ac.in. Tender fee in shape of Demand Draft of Rs 590/- (Non-refundable) should be submitted by bidder in favour of the Registrar, IISER Mohali payable at Mohali or through Online mode in Institute Account (Canara Bank Saving Account Number 4790101001912 and IFSC Code CNRB0004790) However, scanned copy of the Tender fee should be uploaded on website along with technical bid. The hard copy of the same in original to be sent to the address mentioned below duly superscribing the supply/work name and reference/tender ID on the envelope and same must reach before opening of the bid and if not received before due date the bid will be summarily rejected. **Micro & MSME/NSIC and Firms registered and the firms registered with concerned Ministries/ Departments, the bidders are exempted from payment of Tender Fee/EMD as per GOI notifications/GFR (2017) and Ministry of Finance OM No. F.9/4/2020-PPD dated 12 November 2020.**

Bidders will also be required to execute bond/undertaking Bid Security Declaration Form attached as ANNEXURE-I for availing exemption to submit EMD.

The Original Tender Fee should be sent to:

Assistant Registrar (P&S)
Indian Institute of Science Education and Research Mohali
Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab,
India, Pin: 140306

Non-receipt of original Tender Fee will lead to rejection of tender.

ITEM WISE DETAILS

Sr. No.	Description	Qty. (in units)
1.	Supply and Installation of Semi-Automatic Ultrasonic wedge bonder for wires and ribbons and accessories <u>TECHNICAL SPECIFICATIONS: AS PER ANNEXURE-II</u> <u>*The attached ANNEXURE-II must be filled by the bidder duly stamped and signed.</u>	01

A) **IMPORTANT NOTES:-**

- I. **This is a domestic Tender according to the DPIIT Order dated 15/07/2017 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. Bidders should also give details of Locations(s) ;at which the local value addition is made. Bidders are requested to furnish the declaration regarding local content/locations in Annexure III.**
- II. **The online updated Price BOO is in INR format. Bids are invited in INR only against domestic tender.**
- III. **The Online bids should be submitted directly by the original manufacturer/supplier. If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company.**
- IV. **All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.**
- V. **Auto-extension of last date for E-Tenders has been activated by CPP Portal which has participation 2 bids or less.**
- VI. **Warranty: One year, if not specified above.**

B) **SUBMISSION OF TENDER**

- I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. <https://eprocure.gov.in/eprocure/app> only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.
- II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.
- IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. **Also bidders applying against ‘MSME/NSIC Certificate’ issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for “supply & installation of Desktop” the certificate should be issued for activity/area of “Computer supply and services activities etc” otherwise bid will be REJECTED without notice.**
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

C) INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.
2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.
3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.
4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
5. THE INSTITUTE IS EXEMPTED FROM CUSTOM DUTY under notification no- TU/V/RG/-CDE(1062)/201 CUSTOM DT.30.08.2016.
6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of GST should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.
7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.
8. Bidder/s quoting in currency other than **Indian Rupee (INR)** should explicitly mention the currency in which tender quoted wherever applicable in Technical Bid along the tender documents.
9. The delivery period should be specifically stated. Earlier delivery will be preferred.
10. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.
11. Validity of offer: 90 days.
12. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 3% of the value of supply order, in terms of *Ministry of Finance, DoE, GOI, OM. No. F.9/42020-PPD dated 12-11-2020* and as per norms may be sought from the firms.
13. The right to reject all or any of the quotation and to split up the requirements for itemized L-1 or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website <https://eprocure.gov.in/eprocure/app> and <http://www.iisermohali.ac.in>
14. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

-Sd-
Assistant Registrar (P&S)

ANNEXURE-I

Bid Securing Declaration Form

Date: _____ E-Tender No. _____ E-Tender ID _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders. I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)
in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration)
Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)
Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

PS: *Furnish the above in original stationary/letter head with signed and sealed.*

ANNEXURE-II

Semi-Automatic Ultrasonic wedge bonder for wires and ribbons			
General	The tool must work as an ultrasonic wedge wire bonder for Al and Au wires. A separate bond head for ribbon or any other option for combining the ribbon/wire options must be provided. The unit must bond on thin films without damaging of pads. Please provide video demos of quoted models. IISER reserves the right to send samples for testing during the tender period or evaluation period. Interested bidders can contact stores@iisermohali.ac.in for samples. Apart from bonding chips on PCBS it must bond components like connectors in microwave housings to PCBS or chips directly		
	Feature	Specifications	Comments/ Compliance
1	Bonding Methods	Wedge-Wedge	
2	Bonding Process	Ultrasonic/thermosonic	
3	tool tip	Standard wedge and ribbon tool, Heated tool tip up to 200 deg C controlled electronically as option	
4	Bondable Wires	Gold & Aluminium	
5	Wire Size, Ribbon Size	Gold and Aluminium Silicon wire dia: 18 microns to 75 microns Ribbon: up to 40 x 250 microns thickness by width.	
6	Ultrasonic frequency of transducer	100KHz and above.	
7	Ultrasonic Power range	0 to 15 W (<i>or as per machine design can be higher</i>) _	
8	Bond Time range	10mS to 1000 ms in steps of mS (small deviations will be allowed in upper limit)	
9	Bond Force range	0 to 300 gm or larger range programmable with 1gm or better resolution with separate force options for 1 st and 2 nd Bonds	
10	X and Y axis control	18x18 mm in fine motion with ~ 10 microns precision and about 80x80 mm overall in coarse via levers or mouse and manual placement of holder for larger distances	
11	Z-control	Up to ~40 mm or more with adjustable work holder. (models with higher Z-range a~ 60 mm can quote fixed holder)	.
12	Z-control	manual in 5 micron steps and programmable motorized stroke 50 mm or better.	
13	Automatic Y or X	Motorized motion in either Y or X axis as per machine design (20mm) . Manual should be decided by user.	
14	Programs	8 or more	
15	Wire Feeding	standard 2" Wire spool	

16	Wire Feed angle	90 degree vertical feed. In case quoting angled feed models must quote bond head for ribbon also and demonstrate ease of bond head change process clearly by video and manual.	
17	Wire termination	Table tear.	
18	Bond pad size	Minimum Bondable pad size must be 50 microns with 50 microns pitch or smaller.	
19	Wire Clamp Movement	Automatic	
20	Work Holder Size & Temperature Range	approximately 80 mm with clamps for holding PCBs. Fully Adjustable height or system with 60 mm or better Z range.	
21	Input Power supply	230 V,50 Hz	
22	Stitch capability	YES	
23	Automatic Loop Height	YES Using 25µm wire: Min height is 70µm Max. height 20mm or more automatically.	
24	Multi loop control	Programmable and interactive mouse control 70µm - 200µm loop height and loops lengths up to 20 mm or more in auto mode	
25	Substrate height Sensors	Automatic Sensor to sense the height of the chip and start bonding on contact	
26	Tail length	Programmable Using a 25µm wire Min: 25µm Max:100µm or less.	
27	ESD Protection	Tool tip must be grounded and galvanically isolated from other internal source of static discharge. Mention any additional grounding requirements.	
28	Stereo Microscope	a. Zoom range 1.0-6.0x or better b. Magnification range 10x-60x/ with eyepiece 10x or better c. Working distance \geq 100mm d. Must be focused on sample stage. e. Field of view min. 20.0 mm or more f. ESD Safe g. Microscope mounts stay in focus with height adjustment. h. Adjustable lighting with good clearance Microscope specs can with working distance of tool.	
29	Microscope camera quote as an additional option or upgrade in future And Monitor for camera or to be integrated with main system monitor	resolution: 1080p or better; frame rate: 25fps or better; output interface: HDMI or VGA; Monitor size: 7" or better; resolution: 720dpi	
30	Monitor for main system	A LCD monitor to see the programs, visually adjust the loops etc must be given. Can be touch screen or menu driven via buttons or keyboard as per model.	

31	PC	If a PC is needed provide a good brand like ASUS DELL or HP with I5 or better configuration 8GB RAM and SSD drive 250 GB Windows 10 and monitor. Any inbuilt PC must be Industrial grade.	
32	Software/Firmware	All firm ware must be loadable on site in case of erasure via USB . Any software must be loadable from CD or USB. Copies of firmware software must be given free	
33	Wedge Bond tool	2 pieces for 50 micron Al /Au wires 2pcs of 25 micron wire wedges	
34	Ribbon bonding wedge for 20x100µm for Al or gold ribbon	2 pcs for 20x100 micron thickness x width ribbon of Al (Quote closest matching size.)	
35	~25um~ 50 um Al wire spool, 2inch spool	1 pcs 100m 50 and 25 micron Al wire spools	
36	Sample Stage	Must hold PCBs and PLCCs etc.	
37	Heated sample stage	Same as previous with ~ 200 deg C heating	
38	20x100 micron Al ribbon	1 spool 2" spool 100 m (Quote closest matching size to match wedge tool)	
39	Tweezer set	Two sets of fine wire Cutting tweezers and Two fine tweezers for threading wire must be provided.	
40	Tools	Simple tool kit Stanley, Bosch or Taparia make. Must have 4 pcs extra of Allen key of size needed for changing or adjusting wedge. Any special tools needed than standard tools must be provided.	
42	ESD Work Table and Chair	Simple low cost metal table with grounded ESD sheet and steel stool or ESD proof chair with grounding wire for ESD. Must be convenient height for user to have a clear view and importantly ground able for ESD. Common grounding point and strap for user to ground themselves while connecting ESD devices	
43	Installation	Free Installation and training must be provided.	
42	Warranty	1 year on site with standard performance bank guarantee.	
43	OEM	Main unit must be from one OEM.	
44	Country of Origin	If main unit is manufactured in a Country sharing land border with India appropriate Govt permissions must be submitted.	
45	Service	A local service Engineer must be available for site visits. Unit must guarantee service for 10 years with proper spare parts made available. Local Agent must agree to give Indemnity Bond to ship unit outside IISER for repair.	
46	References	References from at-least 5 or more from National Institutes like IITs IISERS or Industry like Semiconductors for similar models. If no unit is sold in India Give 10 International references in Academic or Research labs and few from Industry with at-	

		least three units sold out of country of origin. If references are not available in India local agent must give apart from standard performance Bank Guarantee for 1 year a 4 years of Indemnity bond for full value of main product without depreciation except for bonding wedges and wires.	
47	Test samples	Interested suppliers can write to stores@iisermohali.ac.in to obtain test samples. IISER reserves the right to send test samples or not based on documents.	
48	Evaluation	Provide user manual, brochure for quoted model, Video of demo. IISER may ask for test samples also during or after quote period. Small deviations in specs will be allowed based on customers feedback on ease of use and possibly test samples.	
49	Make in India	Only suppliers qualifying via appropriate documents for Class I or Class II suppliers must quote. Rest will be disqualified.	
50	Country of Origin	Manufacturers where significant manufacturing is done in countries sharing land border with India must have appropriate Govt of India permissions to export.	

In financial bid items to be quoted:

	F1	Main Wire Bond unit with all essential accessories for installation including some sample wire and ribbon for test during installation with ESD table etc and standard 1 year warranty	
	F2	Ribbon Bond attachment if separate unit	
	F3	Boding wedges for ~50 micron Au and Al wires 2 pcs	
	F4	Boding wedges for ~25 micron Au and Al wires 2 pcs with 1 spool of wire 25 micron Al wire.	
	F5	Boding wedges for ribbon 150 micron x 40 microns 2 pieces	
	F6	Cutting Tweezers and wire threading tweezers	
	F7	Standard tools kit and any additional special tools needed	
	Upgrades		
	U0	Upgrade to heated tool tip.	
	U1	Upgrade option for video display of microscope	
	U2	Heated sample stage	
	U3	Cost per site visit after warranty period.	
	U4	Extended warranty for 2 extra years.	
	wires		
	W1	25 micron Dia Al-si alloy wire on 2" spool for bonder	
	W2	50 micron Dia Al-si alloy wire on 2" spool for	

		bonder	
	W3	50 micron Dia Au wire on 2" spool for bonder	
	W4	20x100 micron Al ribbon 100 m on 2" spool	
50	Price comparison	All units F 1 to 7 will be used for deciding L1. IISER Mohali will decide on which subunits to buy. IISER may place separate order for wires if diameter matching with qualified tool. Suppliers may quote separately only for wires as accessories.	

ANNEXURE-III

SELF DECLARATION
[For Local Content of Products, Services or Works]

To,

The Director
Indian Institute of Science Education and Research
(Established by Ministry of Education, Govt. of India)
Sector-81, Knowledge city, PO-Manauli,
SAS Nagar Mohali-140306, Punjab

1. With reference to Order no P.-45021/2/2017 PP (BE-II) dated 04.06.2020 and No. P-45021/2/2017-PP(BE-II) dated 16-09-2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India, we fall under the following category of supplier (please tick the correct category) for the items for which this tender has been floated and being bided.

- Class I local supplier – has local content equal to more than 50%. Local contents added at _____ (name of location).
- Class II local supplier – has local content more than 20% but less than 50%. Local contents added at _____ (name of location).
- Non-local supplier – has local content less than or equal to 20%. Local contents added at _____ (name of location).

2. We are solely responsible for the abovementioned declaration in respect of category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we may can be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Signature & seal of the company

Name and address of the organization

.....
.....
.....

Note: In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier' / 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the 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.