

 IIT PALAKKAD	भारतीय प्रौद्योगिकी संस्थान पालक्काड <b>Indian Institute of Technology Palakkad</b> अहलिआ एकीकृत कैम्पस, कोज़िपारा Ahalia Integrated Campus, Kozhipara पालक्काड- 678557 Palakkad - 678 557	दूरभाषसंख्या/ Phone no: 04923 - 226 300/590/586  ईमेल/ Email : purchase@iitpkd.ac.in
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Prof. Job Kurian  
Registrar i/c

Ref : Wire Bonder  
Date : 22.12.2017

**Open Tender No: IITPKD/CIF/JB/087/2017**

**Due Date: 12.01.2018 AT 10.00 AM**

Dear Sir/Madam,

On behalf of the **Indian Institute of Technology, Temporary campus, Palakkad, Quotations are invited for " Wire Bonder "**. The Specifications are given in the Annexure.

**Technical bid Opening: The Technical bid will be opened on 12.01.2018 at 10.00 AM at Academic Block, IIT Palakkad.**

#### **Instructions to the Bidder**

- (i) **Preparation of Bids:** - The tenders should be submitted **under two-bid system (i.e.) Technical bid and Financial bid in separate envelopes**. The technical bid should consist of all technical details along with commercial terms and conditions. No prices should be included in technical bid. Financial Bid should indicate item - wise prices for the items mentioned in the technical bid. The technical and the financial bids should be put in separate covers and sealed. Both sealed covers should be put into a bigger cover. **Bids must either be spiral bound / stapled together. No loose sheets will be accepted. All pages must be numbered.**
- (ii) The Quotations duly sealed and superscribed on the envelope **with the reference No. and due date, should be addressed to the undersigned so as to reach on or before the due date stipulated above.**
- (iii) **Delivery of the tender:** - The tender shall be sent to the below-mentioned address either by post or by courier so as to reach this office before the due date and time specified in the Schedule. The offer/bid can also be dropped in the tender box on or before the due date and time specified in the schedule. **The tender box is kept in the office of the Academic Block, IIT Palakkad, Ahalia Integrated Campus, Kozhipara, Palakkad-678 557.**

**(iv) Opening of the tender:** - The offer/Bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and will be examined by a technical committee which will decide the suitability of the bid as per our specifications and requirements. The bidders will be invited for opening of Technical bids. **The Bidder's representative should carry authorization letter from their company empowering them to participate in the Pre-bid and tender opening meetings.** In respect of opening of financial bid, those bidders who are technically qualified only will be called.

**(v) Prices:** - The price should be quoted in nett per unit (after breakup) and must include all packing and delivery charges indicated separately for each item. **The price indicated should be CIF/CIP Kochi.** The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. The price should be quoted without custom duty. **The custom duty will be paid at concessional rate against duty exemption certificate.**

**(vi) Agency Commission:** - Agency commission, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. **Terms of Delivery:** - The item should be supplied to our Institute as per Purchase order. The installation and commissioning should be completed as specified **by us in the attached schedule.**

**(vii) Acceptance & Rejection:** IIT Palakkad reserves the full right to accept / reject any tender at **any** stage without assigning any reason.

Yours sincerely,

**Registrar, IIT Palakkad**

## SCHEDULE

### **Important Conditions:**

- 1) The due date for the submission of the tender is **Due Date: 12.01.2018 AT 10.00 AM**
  
- 2) The offers / bids should be submitted in two-bids systems (i.e.) Technical bid and financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes (separately), transportation, packing & forwarding charges, installation, guarantee, payment terms, pricing terms etc. The Technical bid and financial bid should be put in separate covers **superscribed clearly as "Technical Bid" and "Financial bid"** and sealed. Both the sealed covers should be put in a bigger cover. Open Tender for " **Wire Bonder** " should be written on the left side of the Outer bigger cover and sealed.
  
- 3) **EMD: - EMD should be at 2% (two percent) of the tender value quoted by the bidder.** The EMD should be enclosed with the financial bid which will not be opened for Technical evaluation. Enclosing the EMD in the Technical bid will automatically DISQUALIFY the tenderer. EMD should be in the form of DD in favour of "**Indian Institute of Technology Palakkad**" and payable at Palakkad". The tender without EMD would be considered as UNSOLICITED and will be REJECTED. Photo/FAX copies of the Demand Draft/Banker's pay orders will not be accepted. No interest will be paid for the EMD and the EMD will be refunded to the successful bidder on receipt of Performance Security.
  
- 4) **Performance Security:-** The successful bidder will be asked to submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD or FD Receipt from the commercial bank or Bank Guarantee from any nationalized bank of India. **Only after submission of Performance Security, Purchase Order/Work Order will be released / L.C will be opened.**
  
- 5) **Performance Security in the form of Bank Guarantee:-** In case the successful bidder is a foreign company and wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee from a Nationalized Bank of India.
  
- 6) The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

If an Indian agent is involved, the following documents must be enclosed:

- Foreign principal's proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
  - Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
- 7) The offer/bids should be sent only for a system or equipment that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.
- 8) Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid. No prices should ever be included in the Technical bid.
- 9) Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
- 10) **Validity:** Validity of Quotation not less than 90 days from the due date of tender.
- 11) **Delivery Schedule:-** The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
- 12) **Risk Purchase Clause:-** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
- 13) **Payment:-** No Advance payment will be made for Indigenous purchase. 100% Payment after supply and successful installation and commissioning and certification by the end user. In case of import supplies the payment will be made only through **100% Letter of Credit i.e. (50% payment will be released against shipping documents and 50% after successful installation and meeting acceptance criteria wherever the installation is being done).** **Advance payment may be considered on submission of Bank Guarantee equal to the amount of advance payment.**
- 14) **On-site Installation:** - The equipment or machinery has to be installed and commissioned by the successful bidder within 15 to 20 days from the date of receipt of the **item at site of IIT Palakkad.**
- 15) **Warranty/Guarantee:** - The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately. (For more details please refer our Technical Specifications).

**16) Late offer:** - The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.

**17) Loading and unloading charges will be borne by the bidder/Supplier.**

**18) Acceptance and Rejection:** - I.I.T. Palakkad has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

**19) Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.**

**20) Disputes 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 Palakkad in Kerala.

**21) All Amendments, time extension, clarifications etc., will be uploaded on the institute website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.**

**Acknowledgement:-** It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER  
ALONG WITH SEAL OF THE  
COMPANY WITH DATE**

### **Technical Specification for Wire Bonder:**

A convertible Wedge-Wedge Ultrasonic/thermosonic Wire Bonder for bonding of Aluminum–Silicon Alloy and Gold wires (having diameter from 0.0007 inches or lower to 0.002 inches or higher), to the chip carriers of semiconductor devices. The tabletop machine should be microprocessor controlled with all programmed bond variables and machine settings for each tool head. The programs should remain same in memory and should be retrieved automatically upon conversion. Additionally, the machine should provide unlimited deep-reach access to bond targets on substrates/packages of any X-Y dimension with throat less chassis and micromanipulator. The complete system should be electrostatic discharge (ESD) protected.

### **The technical specifications of the wire-bonding machine are mentioned below:**

1. Bonding Methods: Wedge bonding by both angle-feed wedge bonding and vertical-feed wedge bonding.
2. Micro Manipulator: Counter balanced micro-manipulator with single lever X-Y-Z with pneumatic brakes for bonding.
3. Machine Specifications:
  - i. Machine controls: Automatic microprocessor controlled programmable machine for selection of ultrasonic power, motor motions and machine logics.
  - ii. Memory: 256 KB RAM, with battery back-up
  - iii. Data Entry: Selector switch
  - iv. Ultrasonics: Built-in 8 bit, 4 Watts (Ultrasonic Positioning utility)
  - v. Display: LCD with 4 lines and 40 characters display,
  - vi. Z Tool Range: 0.5625 inches minimum with Z encoder resolution of 0.002 inch,
  - vii. Adjustable bond force range of 10 to 250 gms,
  - viii. Transducer: ½ Wave, 63 KHz,
  - ix. Conventional tool length: 0.750 inch
  - x. Deep Access tool length: 0.750 inch
  - xi. Micromanipulator: Dual counterbalanced, Single lever, 8:1 ratio of mechanical advantage,
  - xii. Wire spool mount: ½ inch with ball bearing roller
  - xiii. Built-in radiant tool heat
4. Microscope:
  - Electrostatic Discharge (ESD) safe stereo zoom microscope.
  - LED Illuminator with stand-alone power supply and mounting hardware (ESD safe).
  - Adjustable height work platform
5. Work Holder: Heated work holder with capability of temperature variation from ambient to 200 °C for substrates of size range 0.5” x 0.5” or lower to 1.0” x 1.0” or higher. The work piece should be held by mechanical clamp, with an overhead clamp blade and adjustable backstop.

6. Bonder Installation Kit: The kit should include essential items like tweezers, cutting shears, unplugging probe, micro-needle tips, scissors, Allen wrenches, Screws, Ball end drivers and Gram gauge.

7. Accessories:

i. Set of bonding Tools

ii. Two spools of bonding wires, each of Aluminum-Silicon alloy and Gold

iii. Tool kit for maintenance (if not included in the installation kit)

Quote separately for all items/accessories, auxiliary equipment and consumables, which are not explicitly specified above however required for smooth functioning of the machines for 3-5 years from date of installation (please provide list with the details). All sample handling tool-kits/consumables should be provided. Wherever, consumables and other items required to handle the system while operating all measurement options, must be quoted separately for enough quantity.

8. Manuals: Operation and service manual in English (electronic and hard copy) should be provided with all the equipment and components. In the technical details, specify clearly about the kind of service/maintenance required for the system.

9. Installation and training: The complete training of all components and options should be demonstrated to maximum specification and free for IIT Palakkad user staff/students members, onsite.

10. Enclose pre-installation guide for the details on electrical power, space and other for all components and essential accessories

11. The quote should specify the model number of the item clearly.

13. Guarantee / Warranty and after sales technical support

The tender must be quoted with three years on-site comprehensive Warranty/Guarantee commencing from the date of complete and satisfactory installation of the equipment against the defect of any manufacturing, workmanship and poor quality of the components. The bidder also must agree and issue a certificate stating that technical query will be responded within 2 working days and the support will be provided within 7 working days from the date of reporting of the technical failure for down time free operation of the instrument.

## Who can participate in the bid?

Only those bidders fulfilling the following criteria should respond to the tender.

1. The bidder should be either an Original Equipment Manufacturer (OEM) of **Wire Bonder** or should be an authorized representative (provide documentary proof) of an OEM.
2. The bidder should be a company registered under the Companies Act, 1956/2013 OR a Limited Liability Partnership /a registered partnership firm OR a sole-proprietorship entity. Appropriate Registration incorporation certificate must be submitted.
3. The bidder must have a registered office in Karnataka/Tamil Nadu/Telangana/Andhra Pradesh/Maharashtra or Kerala. Certificate of registration for the offices to be provided.
4. The bidder must also have a service center in Karnataka/Tamil Nadu/ Telangana/Andhra Pradesh or Kerala. Certificate of registration for the centers to be provided. Details about scope of service activities provided by the service centres must be provided. The contact details of the service engineers must be provided.
5. The bidder must be in existence in the business of supplying **Wire Bonder** for a minimum period of 5 previous financial years (before or since 01 April 2012). Documentary evidences of experience must be provided.
6. The bidder should have implemented orders of **Wire Bonder** worth exceeding INR **10 Lakhs** during previous three financial years (01 April 2014 – 31 March 2017). Copies of the most recent purchase orders and certificates of successful implementation must be included. Copies of financial statements or evidence of turnover must be furnished.
7. The bidder should have documentary evidence of having supplied at least 1 No. of **Wire Bonder** to a Centrally Funded Technical Institution (e.g., IIT, NIT, IISc, IISER, etc.) in the recent past. The bidder must provide a certificate of satisfactory performance of the supplied equipment from the institute to which they have recently supplied. Contact details of the faculty-in-charge of the installed setup must also be provided.
8. Compliance sheet for the technical specification and OEM Brochure have to be attached along with the Technical bid. Vendor has to fill the compliance sheet and mention page number or reference number in OEM brochure. Unfilled / partially filled sheets lead to disqualification.
9. The bidder must provide detailed specification of each equipment/item. Model numbers, data sheets and brochures must be included for all equipment quoted, system and all accessories. Specifications corresponding to quoted model number must be available publicly via OEM's website for scrutiny. If not, bid can be disqualified on technical grounds.
10. Service and warranty for a minimum period of three years for the equipment must be provided. AMC for additional three years must be quoted separately.