

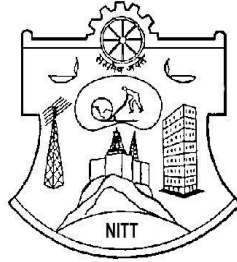
NATIONAL INSTITUTE OF TECHNOLOGY

TIRUCHIRAPPALLI – 15

Department of Metallurgical and Materials Engineering

Web : www.nitt.edu

Tel. No: 0431-2503464



TENDER DOCUMENT

Tender Notification No.: NITT/F.No.006/PLAN/ 2015-16/MME

Dated: **21-1-2016**

- Name of the component : **Indentation fracture toughness measurement unit**
- Quantity required : One unit with all accessories and spares (for details refer Section 3)
- EMD Amount : **Rs. 30,000/-**
- Cost of the Tender Document : **Rs. 150/-**
- Delivery : **8 Weeks from the date of purchase order**
- Last Date of submission of Tender : **8/02/2016 by 1.00 pm**
- Address for submission of Tender : **Kind attention particulars must be included in the address**
The Director,
National Institute of Technology- Tiruchirappalli,
Tiruchirappalli, Tamilnadu, India, Pin Code– 620015
Kind Attention to: Dr. N. Ramesh Babu
Assistant Professor,
Department of Metallurgical and Materials Engineering,
Email: rameshroith@gmail.com (or) nrb@nitt.edu
Landline: 0431-2503464; Mobile: 09944932221
- Date of opening of bid : **8/02/2016 by 2.00 pm**



**NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI – 15**

Department of Metallurgical and Materials Engineering

NITT/F.No.006/PLAN/ 2015-16/MME

Dated: **21-1-2016**

NOTICE INVITING TENDER

The National Institute of Technology, Tiruchirappalli (NITT) is an autonomous body under MHRD, GOI, imparting Technical Education and engaged in Research Activities. It is proposed to procure the following component for the departmental academic/research activities.

Sealed Quotations under **Two bid System (Two cover system)** are invited for the following component subject to the following terms and conditions, from the reputed manufacturers or their authorized dealers so as to reach this office on or before scheduled date and time. The technical cover will be opened on the same day in the presence of bidders or their authorized agents who may choose to be present.

Name of the component	: Indentation fracture toughness measurement unit
Quantity required	: One unit with all accessories and spares (for details refer Section 3)
EMD	: Rs. 30,000/-
Cost of the Tender Document	: Rs. 150/-
Time for completion of supply after placing purchase order	: 8 Weeks
Last Date of submission of Tender	: 8/02/2016 by 1.00 pm

Tender to be submitted at the following address: **Kind attention particulars must be included in the address**

The Director,
National Institute of Technology- Tiruchirappalli,
Tiruchirappalli, Tamilnadu, India, Pin Code– 620015

Kind Attention to: Dr. N. Ramesh Babu

Assistant Professor,

Department of Metallurgical and Materials Engineering,

Email: rameshrohith@gmail.com (or) nrb@nitt.edu

Mobile: 09944932221

Place, Date and time of opening of bid: Date: : **8/02/2016** Time: **2.00 pm**

Venue: **NIT Central Store Room/NIT administrative Block**

Note : The Institute shall not be responsible for any postal delay about non-receipt / non delivery of the bids or due to wrong addressee.

INSTRUCTIONS TO BIDDERS

1. This document set contains the following:
 - a) Terms and conditions of the Tender
 - b) Details of the Firm offering this Quote
 - c) Technical Compliance Form
 - c) Quotation form (Price Bid)
 - d) Currency Form (quoted on behalf of the foreign suppliers)
 - d) NIT-T's check list copy
2. The bidder's copy is for your future records. Please fill in and return only NIT-T's copy.
3. The bidder should give details of their technical soundness and provide list of customers of previous supply of similar items to Universities, Institutes or Government Departments/Undertakings/public sectors with contact details. The details of the agency/profile should be furnished along with the copy of all related documents.
4. Read through the terms and conditions given and affix your signature and seal if you find them acceptable. Any deviations may be recorded. Read carefully list of specifications that we have enclosed.
5. Fill in the questionnaire regarding the Firm.
6. The downloaded documents '**Technical Compliance Form**' and '**Quotation Form (Price Bid)**' should be **TYPE WRITTEN USING CAPITAL LETTERS ONLY**. At the time of filling the "**Quotation Form (Price Bid)**" make sure that you have not missed anything. Specify the model number & specification for each item. The form should be filled item-wise. Do not leave blank fields. If you are not quoting for a specific item, you should specify "**NOT QUOTING**".
7. **Do not use ambiguous terms like "yes", "complied" or "available"**. Specifically mention the matching specification of the product offered by you. Make sure that you have affixed your signature with date and seal on all the documents.
8. Please send the tenders in a sealed envelope super scribed as "**QUOTATIONS AGAINST TENDER NOTIFICATION NO: NITT/F.No.006/PLAN/ 2015-16/MME Item Name: Indentation fracture toughness measurement unit**" so as to reach "The Director, National Institute of Technology, Tiruchirappalli - 620 015, India, Kind Attention to: Dr. N. Ramesh Babu, Assistant Professor, Department of Metallurgical and Materials Engineering" on or before **8/02/2016 by 1.00 pm along with the print copy a Softcopy of the Technical Compliance form and Quotation Forms in MS-Excel file format in a CD/DVD or USB drive**.
9. For any further clarifications, contact by E-Mail: nrb@nitt.edu or rameshrohith@gmail.com by written request to "The Registrar, National Institute of Technology, Tiruchirappalli - 620 015, India"

Last Date for receipt of tender at NIT-T : **8/02/2016 by 1.00 pm**
Opening Date for Tender : **8/02/2016 by 2.00 pm**

CHECKLIST TO BE FILLED IN BY BIDDER

List of documents to be enclosed	Completed & Signed
1. Terms and Conditions form	YES / NO
2. Details of the Firm offering this Quote	YES / NO
3. NIT-T's Quotation form (Technical & Price Bid)	YES / NO
4. Currency Form (quoted on behalf of the foreign suppliers)	YES / NO
5. Other technical specifications & pamphlets	YES / NO

- Note:** 1. "Cover" should contain the following:
- a. Form of "**Acceptance of Terms and Conditions**".
 - b. Form of "**Firms details**"
 - c. Pamphlets, if any (in a separate sealed cover)
2. Quotation Form (Technical, Price Bid and Currency Form)

Please retain this page with you for your future reference.

Section 1. IN THE CASE OF TWO BID TENDERS

1.1 Bids are to be submitted under two bid system (two cover system).

1.2 Cover 1:

Cover 1 should contain the following:

- a. EMD - Earnest Money Deposit (EMD) is to be remitted by way of Demand Draft/FDR/BANK Guarantee drawn on any Nationalised bank in India by Demand Draft drawn on any scheduled bank in favour of “The Director, NIT, Trichy” payable at Trichy should be submitted. EMD shall bear no interest. Any bid not accompanying with EMD is liable to be treated as non-responsive and rejected. If EMD is more than 1Lakh and less than 5 lakhs FDR (Fixed Deposit Receipt) is acceptable. If EMD more than 5Lakhs bank guarantee is also accepted.
 - b. Technical pamphlets
 - c. Detailed technical specification
 - d. The agency should furnish copy of license certificate for manufacture/supply of the item*
 - e. The agency should furnish Income Tax PAN number & TIN number.*
 - f. The agency should furnish the last three years balance sheet approved by the CA and the IT clearance certificate.*
 - g. Warranty period offered for the tendered item to be specified. If the warranty period is not conforming with the schedule of requirements given in section 3 of the document, the bid is liable to be treated as non-responsive and rejected.
 - h. Duly filled up technical questionnaire, if any
 - i. Duly filled up deviation schedules to technical specification
 - j. Copy of supply orders completed during the last three years
 - k. If the prices are revealed in the cover 1, the offer will be summarily rejected
- 1.3 The cover 1 shall be super scribed as ‘Technical cover’ duly indicating the Tender reference No. and the due date of opening.

* Appropriately pertaining to the country of origin.

1.3 Cover 2:

Cover 2 should contain the following

Cover 2 shall contain Price only and shall be super scribed as ‘Price Cover’ duly indicating the Tender Reference No. and the due date of opening.

Each Cover shall be sent in a double sealed cover. The inner covers (Cover 1 and Cover 2) should be sealed individually with the Sellers’s distinctive seal and super scribed with the tender reference no. and due date of opening. Both the inner covers shall be placed in a common outer cover which shall also be sealed with seller’s distinctive seal and super scribed with the tender reference no. and due date of opening.

Mention “Kind Attention: Dr.N.Ramesh Babu, Department of Metallurgical and Materials Engineering”, and submit at the address given in the Notice Inviting Tender.

Cover 1 will be opened on the scheduled date and time mentioned in the tender enquiry.

Cover 2 of the technically and commercially suitable offers alone will be opened on a date which will be intimated to the qualified bidders by email.

Section 2. “TERMS AND CONDITIONS FORM”

IMPORTANT: READ ALL THE FOLLOWING TERMS AND CONDITIONS AND SIGN THE ACCEPTANCE CLAUSE FOLLOWING IT

1. The offers should be addressed to “The Director, National Institute of Technology, Tiruchirappalli 620015, India” and should be sent in a sealed envelope super scribed “**QUOTATIONS AGAINST TENDER NOTIFICATION No.: : NITT/F.No.006/PLAN/ 2015-16/MME Item Name: Indentation fracture toughness measurement unit** so as to reach us **on or before 8/02/2016 by 1.00 pm**
2. Each offer should be sent in a sealed cover with the tender documents. Tenders received through email or FAX will not be considered. **Softcopy of the Technical Compliance form and Quotation Forms should be submitted along with the tender in MS-Excel file format in a CD/DVD or USB drive. However, if there is any dispute between Hard copy and Soft copy, Hard copy will be taken.**
3. The tenders will be opened on **8/02/2016 at 2.00 pm** in the presence of the vendors present with authorization letter from the respective companies / firms. Suppliers intending to attend the tender opening should intimate us in advance. At the time opening of Tender opening, the name of those who have submitted their offers along with the details of their remittance of EMD and Cost of Tender Document will only be read out and no other information/ details whatsoever will be shared at this stage
4. Full technical specifications and pamphlets should be sent along with the tenders. **Offers without proper technical specifications will be rejected.**
5. The rate quoted should be on unit basis excluding Taxes. Taxes and other charges should be quoted separately, considering exemptions if any.
6. All offers should indicate the taxes and duties applicable, if any. Additional charges for packing, forwarding, freight, insurance etc., if any, should be clearly mentioned. Clearance at Customs will be arranged by us.
7. NIT-T is paying concessional Customs & Excise duty under Government of India Notification No.51/96 for Central Customs and 10/97 for Central Excise Duty vide Certificate No.TU/V/RG-CDE(183)/2011 dt.10.10.11. Currently the purchaser is paying 5% Basic Customs Duty, 2% Educational Cess on Basic Customs Duty, 1% Higher Education Cess on Educational Cess, and 4% Import Additional Duty.
8. The Institute is not authorized to issue C and D forms of Sales tax certificate.
9. In case the offered items are to be imported, the rates should be quoted in foreign currency on C.I.F. Chennai Airport basis, and it should include the Freight up to Chennai airport and the insurance cover should be up to National Institute of Technology, Tiruchirappalli. NIT-T shall pay Customs duty if any.
10. If the price quoted is in foreign currency and if the order value is more than US\$10,000 then 100% payment will be made through **Letter of Credit (LC) at sight on acceptance**. If the order value is less than US\$10,000, then 100% payment will be through a Telegraphic Transfer (TT). **The bank charges outside India should be borne by the Supplier / Beneficiary. Part shipment not allowed.** If the price quoted is in Indian Rupees, then 100% payment will be made only after installation and commissioning. **No advance payment will be made.**
11. No revision of the price bid will be allowed once the price bids are opened. In case of foreign currency, the agency should mention the % of currency fluctuations they can bear.
12. No increase in price will be allowed after our firm orders are placed.
13. **Payment of excise duty and sales tax / VAT (on ultimate products)** as applicable on the closing date of tender will be to the supplier’s / contractor’s account. Any statutory variation (both plus and minus) in the rate of excise duty/sales tax/VAT after closing date of tender/revised price bid but before the expiry of the contractual delivery / completion period will be to the account of the office. The bidder(s) will indicate, in their bid, the amount with exact rate of the Excise and Sales tax/VAT on ultimate finished product, as applicable at tendering stage, separately in the bid. In case the above information subsequently proves wrong, incorrect or misleading (a) this Institute will have no liability to reimburse the excess in the difference in rates of the item under which the duty/tax assessed finally (b) this Institute will have the right to recover the difference in case the rate of duty / tax finally assessed is on the lower side.
Any increase in excise duty, sales tax / VAT during extended period of the contract / supply order will be to supplier’s / contractor’s account where such extension in delivery of the materials/completion of the

project was on the request of supplier / contractor. However, any decrease in excise duty/sales tax/ VAT during extended period of the contract / supply order, will be to the account of this Institute.

14. The warranty period should be clearly mentioned. [The maintenance charges \(AMC\) under different schemes after the expiry of the warranty should also be mentioned.](#)
15. Quote should come from authorized dealer or distributor or reseller for each of the product quoted. An authorization letter should accompany your quote for each product quoted; otherwise it may lead to rejection.
16. The delivery period and other terms should be clearly mentioned.
17. Eligibility: Quotation from registered firms/company's / manufacturer under TNGST/CST / other statutory bodies alone be considered. Any Manufacturer / Supplier / Dealer who has been declared ineligible by World Bank/government of India shall not be eligible to participate in this bid. Any fraudulent practices including concealing of facts at the time of submission of bid and there after shall lead to disqualification. List of beneficiaries especially from Educational Institutions / R & D Institutions should also be enclosed with the quotations.
18. For those instruments Cost exceeding 5,00,000/- the company should have (i) Three similar works, each of value not less than 40% of the estimated cost put to tender, or (ii) Two similar works, each of value not less than 50% of the estimated cost, or (iii) One similar work of value not less than 80% of the estimated cost, all amounts rounded off to a convenient full figure, in the last 7 years ending on the last day of the month previous to the one in which the tenders are invited.
19. Complete user, technical and service documentation, and spare parts catalogue are to be provided along with the supply of the item.
20. The vendors are informed that they should not call us over phone or contact us in person. All clarifications can be obtained through E-Mail/FAX/Post. Vendors shall not make attempts to establish unsolicited and un-authorized contact with us after the opening of the offers and prior to the notification of the award. Any attempt by any vendor to bring to bear extraneous pressures on us shall be sufficient reason to disqualify the vendor.
21. Delay / loss in postal transit or due to other reasons will not be NIT-T's responsibility.
22. We are not responsible for accidental opening of the covers that are not properly super scribed and sealed before the time scheduled for opening.
23. The tender should be made only on the "Technical compliance form" & "Quotation form" which is available in our website, otherwise it shall lead to rejection. [The technical compliance form & PRICE BID FORM should be duly filled up \(preferably TYPE WRITTEN IN CAPITAL LETTERS\) and should clearly mention the features offered by the bidder against each specification.](#)
24. Authorized signatory should sign on all the pages. [Bids without authorized signatures will be rejected.](#)
25. The manufacturers of the quoted make of the product must be of national / international repute and having ISO /BIS certificate.
26. **Liquidated damages:** If the bidder/supplier, after accepting the Purchase Order, fails to deliver any or all of the Goods within the period specified in the Order, NIT-T shall, without prejudice to its other remedies under the Rules of Purchase, proceed to cancel the order or agree to accept a delayed delivery on the condition of payment of liquidated damages by the bidder / supplier a sum equivalent to 0.50% of the total cost as indicated in the Purchase Order (which will be deemed as agreed price) for each week or part thereof of delay until actual delivery or performance is completed and such penal charges shall be limited to a maximum of 5% of the total cost. Once the maximum is reached NIT-T may proceed on its own to consider the termination / cancellation of the order.
27. **The vendors are informed that they should sign a stamp paper agreement with us, for Warranty, AMC, etc. before placing the final purchase order as per our terms & conditions and 5% -10% of purchase order value in the form of bank guarantee towards performance security. The bank guarantee will be returned to the supplier after the successful completion of supply, installation, and the warranty period.**
28. Failure to comply with all the terms and conditions mentioned herein would result in the tender being summarily rejected.
29. Vendors are informed that once the companies are shortlisted based on the technical specification, only then the price bids of the firms that meet NIT-T's Technical specification / requirements would be compared.

30. The order will be based on the NITT requirement and quoted prices at the time of ordering. Optional items may also be ordered based on the NITT requirements and quoted prices. Not quoting for optional items may result in disqualification.
31. NIT-T reserves the right to modify or alter the specifications after short listing of tenderers.
32. NIT-T reserves the right to change the order quantity or split the orders among multiple vendors without assigning any reason(s) whatsoever.
33. NIT-T reserves the right to reject any or all the tenders without assigning any reasons whatsoever.
34. NIT-T reserves the right to purchase decreased number of quantity of the item to be purchased
35. The agencies should submit their rate as per the format given in Section 4 of the Notice Inviting Tender in this cover. All the pages of the bid should be signed affixing the seal. All corrections and overwriting should be initialed.
36. The tender will be acceptable only from the manufacturers or its authorized supplier.
37. The bid shall be in the format of price schedule given in Section 4. The contract form as per format given in section 5 shall be submitted. Incomplete or conditional tender will be rejected.
38. Details of quantity and the specifications are mentioned in Section 3 appended to this Notice Inviting Tender
39. The item to be used is strictly according to the specification and subject to test by the Institute/concerned authorities. It must be delivered and installed in good working condition.
40. The Contractor/Supplier shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work/supply in full but he did not derive in consequence of the foreclosure of the whole or part of the works.
41. In case of dispute, the matter will be subject to Tiruchirappalli, Tamil Nadu Jurisdiction only.

Release of EMD: The EMD shall be released after receipt of performance security from successful bidder.

Validity of bids: The rate quote should be valid for a minimum of 120 days. No claim for escalation of rate will be considered after opening the Tender.

Imports: In case, goods are to be imported, the Indian agent should furnish authorization certificate by the principles abroad for submission of the bid in response to this Notice Inviting Tender.

Clarification of Tender Document: A prospective bidder requiring any clarification of the Tender document may communicate to the contact person given in this notice inviting tender.

Amendment of tender document: At any time prior to the last date of receipt of bids, Institute may for any reason, whether at its own initiative or in response to a clarification requested by prospective bidder, modify the Tender document by an amendment.

The Institute may at its own discretion extend the last date for the receipt of bids.

The bids shall be written in English language and any information printed in other language shall be accompanied by an English translation, in which case for the purpose of interpretation of the bid, the English translation shall govern.

The Institute reserves the right of accepting any bid other than the lowest or even rejecting all the bids

without assigning any reasons therefor. The decision of the Institute Purchase Committee is final in all matters of tender and purchase.

The bidder should give the following declaration while submitting the Tender.

ACCEPTANCE

We accept the above terms and conditions and shall comply with them strictly.

NAME OF THE VENDOR:

ADDRESS :

“DETAILS OF THE FIRM OFFERING THIS QUOTE”

(Write or print or type in block letters and please answer all the questions)

1. Name of the firm? 2. Date of incorporation?
3. Nature of the company - Government / Public / Private Company / Partnership / Proprietorship:
4. Specify the number of years in this line of activity by the Company ::

5. Quantity of sales in the last three years for the “.....” (same model that you have quoted)?

2009-2010	2010-2011	2011-2012
<input type="text"/>	<input type="text"/>	<input type="text"/>

6. Turn over in the last three years (Figures should be in Indian Rupees in Lakhs):

2009-2010	2010-2011	2011-2012
<input type="text"/>	<input type="text"/>	<input type="text"/>

7. Provide the postal address, telephone & fax numbers, and email address of the nearest service center.

8. A) Number of service engineers in the above location trained on the product quoted along with their educational qualification, certification and designation (applicable only for instruments) and B) Assured response time for service calls in hours:

A)

B)

9. What would be the delivery period in days from the date we place an official purchase order.

2. Enclose the list of customers to whom you have supplied “.....” during the last 3 years ending 23/03/2012 with full postal address and name of the contact person with phone, FAX numbers, and E-Mail id. Certificate regarding satisfactory performance of the “.....” from the minimum three end users should be furnished.

3. Are you the authorized dealer or distributor or reseller for the products quoted:

4. Have you supplied “.....” to National Institute of Technology, Tiruchirappalli in the last 3 years? If yes, specify the quantity supplied in the last 3 years and last PO reference

5. Was there any elapse or delay in supplying the goods ordered or any service related issue during the warranty period for the products ordered by NIT-T with your firm? If yes, provide details.

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6. On Manufacturer's Side to whom NITT have to contact in case of delayed supply and other issues committed by the authorized dealer / distributor / reseller :

Contact Person Name :	
Address :	
E-mail ID :	Telephone / Cell Phone :

DECLARATION

I/we have not tampered/modified the tender forms in any manner. In case, if the same is found to be tampered/modified, I/we understand that my/our tender will be summarily rejected and full Earnest Money Deposit (EMD) will be forfeited and I/we am/are liable to be banned from doing business with NIT, Trichy and /or prosecuted.

Signature of the Bidder :

Name and Designation :

Business Address :
.....
.....

Place :

Date :

Seal of the Bidder's Firm

SECTION : 3 SCHEDULE OF REQUIREMENTS, SPECIFICATIONS AND ALLIED DETAILS

Name of the Component to be procured	: Indentation fracture toughness measurement unit
Specifications	: Refer Annexure I
Quantity	: One unit with all attachments, accessories and spares as per Annexure 1
Any other details/requirement	: Refer Annexure I
Warranty period required	: Two years or more from the date of acceptance and inspection at NIT, Trichy
Delivery schedule expected after release of purchase order (in weeks)	: 8 Weeks from the date of receipt of purchase order, the order are to be dispatched to NIT, Tiruchirappalli.
EMD (in Rupees)	: Rs. 30,000/-
Performance Security to be given by Successful bidder after release of purchase order (in Rupees)	: 10 % of the equipment Cost

SECTION : 4 PRICE SCHEDULE

[To be used by the bidder for submission of the bid]

1. Component Name :

2. Specifications (confirming to Section 3 of Tender document-enclose additional sheets if necessary) :
3. Currency and Unit Price(excluding Taxes) :
4. Quantity :

5. Item cost (Sl.No.3 & Sl.No.4) (in Indian Rupee) :

6. Taxes and other charges :
 - (i) Specify the type of taxes and duties in percentages and also in figures
 - (ii) Specify other charges in figures :

7. Warranty period (confirming to the Section 3 of Tender document. This should be mentioned in Technical bid also in order to get qualified for Financial bid) :
8. Delivery Schedule (confirming to the Section 3 of Tender document) :
9. Name and address of the firm for placing purchase order :

10. Name and address of Indian authorized agent (in case of imports only) :

11. **Submit the Price bid format as given in Annexure II/ Annexure III**

Signature of the Bidder :

Name and Designation :

Business Address :
.....
.....

Place :

Date :

Seal of the Bidder's Firm

SECTION : 5 CONTRACT FORM

[To be provided by the bidder in the business letter head]

1. {Name of the Supplier's Firm) hereby abide to deliver theby the delivery schedule mentioned in the Section 3 tender document for supply of the items if the purchase order is awarded.
2. The item will be supplied conforming to the specifications stated in the tender document without any defect and deviations.
3. Warranty will be given for the period mentioned in the tender document and service will be rendered to the satisfaction of NIT, Trichy during this period.

Signature of the Bidder :

Name and Designation :

Business Address :
.....
.....

Place :

Date :

Seal of the Bidder's Firm

Annexure I

SPECIFICATIONS FOR Indentation fracture toughness measurement unit

Indentation fracture toughness measurement unit

Sl. No	NITT specification	Bidder's specification should be provided exactly
	Make and Model (to be specified by the bidder)	
1.	The Scope of the supply: The scope includes the micro hardness testing unit, suitable image capturing device, image storing in PC and suitable software for processing the image in PC for the measurement of hardness, PC and printer. Software that supports control, testing, and report creation related to hardness testing, parameter setting and automatic measurement.	
2.	International standards: ASTM E-384; ASTM E-92	
3.	Indenter: Vickers and Knoop (1 number each)	
	Test Force	
4.	8 steps or higher; between 10 - 2000 (gf)	
5.	Loading procedure: automatic –automatic loading/dwell/unloading	
6.	Selection of indenter: motorized turret	
7.	Dwell time: Variable dwell times, 5-60 seconds or higher	
8.	Approach velocity: 60 µm/s (or lower)	
9.	<ul style="list-style-type: none"> a) Test force selection by rotating knob in the machine and simultaneously in the computer (or) b) Motorized selection of test force via PC Note: If you offer (a), Motorized selection of test force via PC to be offered as an optional one	
	Optics	
10.	Eyepiece: 10 X (specify the measuring range at 100 X magnification)	
11.	Standard objectives: The long working distance objectives of 10X (7.8 mm or higher free working distance) and 50 X (0.37 mm or higher free working distance) to be provided. 100 X objective (0.27 mm or higher free working distance) to be offered as an optional item. 50X/ 100X objective must be spring loaded/suitable collision resistant system to be provided.	
12.	Motorized turret capable of fitting Vickers indenter and Knoop indenter.	
13.	The turret should be capable of fitting minimum three objective lenses at the same time.	
14.	Light source: 20 W, adjustable (or) suitable LED light source	
15.	Camera options: Image analysis via PC (WINDOWS-based) Camera: color, 1.3 million pixels or higher (1/2" CCD) Camera : color, 3 million pixels to be coated as an optional item (1/2" CCD) .	
16.	Measurement System: Semiautomatic, manual focus control. After finishing the indentation process, hardness measurement by PC with image analysis to be provided.	
17.	Specimen Stage: <ul style="list-style-type: none"> a) Manual XY Stage with Digital Micrometer head and movement interfaced with PC through connecting cables; (or) b) Motorized XY stage Note: If you offer (a), Motorized XY stage to be offered as an optional one	
18.	Stage size: 100 x 100 mm or bigger size	
19.	X/Y travel: 25 x 25 mm or higher	
20.	Positioning increment: 1 µm	
21.	Maximum specimen height on stage: 60 mm or higher	
22.	Maximum specimen depth from center of indenter: 100 mm or higher	
23.	Maximum opening of vise: 50 mm or higher	

24.	Provision for leveling the stage	
	Data display and handling	
25.	Data entering and display via PC	
26.	Data display: length of the diagonals, hardness value HV/HK, test load (N/gf), dwell time (s),etc	
27.	Statistics: Mean value, maximum/minimum value, standard deviation, etc	
28.	Graphic: line graph, CHD hardness depth	
29.	Data memory: PC	
30.	Interfaces PC: Ethernet, USB ports -6 or higher, other type ports (if required only) for smooth operation of the hardness testing unit, computer peripherals, printer, etc.	
31.	Accessories: Various fixtures for clamping different types of specimens to be quoted under optional items	
32.	Power supply: Single phase, 230/240 V, AC/50 Hz suitable for Indian conditions	
33.	Tester weight: Below 50 kg	
34.	PC and printer: High performance window based desktop PC with 21 inch color LED monitor should be provided for all operations of the hardness testing unit with latest configuration (i-7 processor, 8 GB RAM, 1 TB GB hard drive). A LaserJet printer should also be provided. (Print quality, black-600 x 600 dpi minimum; print speed black-20 ppm or higher).	
35.	Standard test block for the hardness measurement (with calibration certificate) to be provided.	
36.	Bidder to specify the any additional feature/features present in the instrument model you are offering for the above specification.	
37.	Bidder to specify the other (other than standards mentioned in SI.No 2) international standards of testing	
38.	<u>Note to the bidders regarding technical bid:</u> <ol style="list-style-type: none"> Price related information to be given only in the price bid cover, not in the technical bid cover. The order will be based on the NITT requirement and quoted prices at the time of ordering. Optional items may also be ordered based on the NITT requirements and quoted prices at the time of ordering. Not quoting for optional items may result in disqualification. If any feature not mentioned/left over in the technical bid by the bidder, the same will be presumed to be absent without any further references to the bidder/vendor. No further discussion with the bidder can be entertained. All the quoted technical features must be demonstrated after installation with quoted precision. Otherwise, the equipment must be returned to the factory with suppliers cost and the money paid, if any, for the equipment by NITT should be paid back. Mention clearly the service, installation and personnel training. Provide sufficient information about your after-sale service capabilities/man power and a list of customers possessing similar equipment, preferably in south India. Equipment Model and make to be mentioned; brochures should be provided along with the technical bid. All technical specifications/features must be equal to the given NITT specification or higher and superior than the NITT specifications/features given. 	
39.	Warranty: Minimum 2 year warranty should be provided for a continuous operation of the machine & accessories	

Annexure II

PRICE BID FORMAT FOR INDIGENOUS PURCHASES

Tender No. & Date:

Name of the Bidder:

S. No.	Description of the item to be procured	Unit	Quantity	Basic Price in Rupees (Excluding all taxes and duties)	Excise Duty %	VAT/ CST in %	Service Tax in %	Total Amount in Rupees (Inclusive of all taxes and duties)
1	Supply Portion/ Main item (under the letter head of the bidder <i>Individual Item wise break price shall be attached as an Annexure to this price bid</i>)							
2	Additional / Optional items/ Accessories and Spares etc., (Individual Item wise break price shall be attached as an Annexure to this price bid)							
3	Installation and Commissioning Charges, if any							
4.	Packing and Forwarding Charges, if any							
5.	Freight and Transit Insurance Charges, if any							
6.	Any other charges, if any							
7.	TOTAL ALL INCLUSIVE PRICE (Supplied or Supplied, installed and commissioned at NITT on door delivery basis. (i.e., F.O.R. Destination Basis)							
8	QUOTE FOR POST WARRANTY (Additional Warranty beyond the free warranty period): For Equipment supply, the bidder should clearly indicate the AMC Rate, for two years period, after the expiry of Warranty period, in non-comprehensive terms (does not include cost of spares). Failure to which the offer may NOT be considered even it turns out to be at the lowest price. The tender will be evaluated on Landed Cost + AMC rate for 2 years. However, NIT, Tiruchy reserves the right to opt or otherwise for AMC, for maintenance of the equipment after the free warranty period.							

Authorized signatory of Bidder with Seal

Note 1: NITT is eligible for exemption from Excise Duty and Concessional Customs Duty. Please refer the tender document. As regards Service tax, educational auxiliary services are exempt from Service Tax. As regards, sales tax NITT is not authorized to issue C or D forms for concessional VAT. However, it can issue end user certificate for claiming concessional VAT. Note 2: Price bid Format should be supported with separate sheet duly typed and signed on the letter head of the bidding firm/ company indicating details i.e., different components/ parts/ units of the equipment (if any) with number, name and price of each part.

Annexure III
PRICE BID FORMAT FOR IMPORTS

Name of the Material/ Equipment

Name of the **Manufacturer**

MAKE of the Material/ Equipment

MODEL Number if any

Country of Origin:

S. NO	Item wise description of Goods/ Materials/ Equipment to be supplied from Foreign Country	Quantity	Rate Per Unit (In Foreign Currency)	Amount (in Foreign Currency)
1	Ex works price of the Main item/ material/ equipment			
2	Ex Works Price of the Additional/ Optional items, if any			
3	Ex works Price of Accessories and Spare Parts, if any			
	Total Ex Works Price (in Foreign Currency)			
4	Educational Discount, if any, offered on the Ex-Works price			
5.	Ex-Works Price after Discount (in Foreign Currency)			
6.	Add: Packing and Forwarding Charges if any from the Ex-works to loading Port/ Airport			
7.	Total FOB Price (in Foreign Currency)			
8.	Add: Air Freight, Insurance and Handling Charges up to Chennai Airport			
9.	Total CIF Value (Up to Chennai) or CIP Value (Up to Chennai) in Foreign Currency			
10.	TOTAL ALL INCLUSIVE TOTAL PRICE PAYABLE BY NITT IN FOREIGN CURRENCY			
11	QUOTE FOR POST WARRANTY (Additional Warranty beyond the free warranty period): For Equipment supply, the bidder should clearly indicate the AMC Rate, for two years period, after the expiry of Warranty period, in non-comprehensive terms (does not include cost of spares). Failure to which the offer may not be considered even it turns out to be at the lowest price. The tender will be evaluated on landed cost + AMC rate for 2 years. However, NIT, Tiruchy reserves the right to opt or otherwise for AMC, for maintenance of the equipment after the free warranty period.			

Authorized signatory of Bidder with Seal

Note 1: NITT is eligible for exemption from Excise Duty and Concessional Customs Duty. Please refer the tender document. As regards Service tax, educational auxiliary services are exempt from Service Tax. As regards, sales tax NITT is not authorized to issue C or D forms for concessional VAT. However, it can issue end user certificate for claiming concessional VAT. Note 2: Price bid Format should be supported with separate sheet duly typed and signed on the letter head of the bidding firm/ company indicating details i.e., different components/ parts/ units of the equipment (if any) with number, name and price of each part.