



INDIAN MARITIME UNIVERSITY
(A Central University Govt. of India)
P-19, Taratala Road, Kolkata - 700088
Tel: (033) 2401 4673/4674/4675/4676/4678/3677, Fax:
(033) 2401 4431/4333

NOTICE INVITING TENDER

Sealed tenders are invited for “**Supply of Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory (1 Each)**” under Two cover system: Bidders are advised to study the Tender Document (including all Sections, Schedules and Annexure etc) carefully. Submission of Tender shall deem to have been done after careful study and examination of the Tender Document with full understanding of its implications.

The Tender Document can be downloaded free of cost from IMU KC website www.merical.ac.in/www.imu.edu.in from 31.01.2019 onwards. The last date for receiving tender at IMU Kolkata Campus is 12:00 PM on 21.02.2019.

Director

Tender Abstract

1	Title	:	Supply of “ Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory” for Research in Industrial Applications (1 Each)
2	Notice Inviting Tender No.	:	IMU/KC/BRV-Mat dated 31.01.2019
3	Tender document download date	:	31.01.2019
4	Pre bid meeting	:	04:00 PM on 08.02.2019, Indian Maritime University, Kolkata-700088.
5	Last date and time for receipt of bids	:	12:00 PM on 21.02.2019
6	Date and time for opening of Technical bid	:	12:30 PM on 21.02.2019
7	Date and time for opening of Financial bid (for technically qualified bidders)	:	To be intimated later
8	Proposal currency	:	Prices shall be quoted in Indian Rupees (INR)
9	Language of the proposal	:	This proposal should be filled in English language only. If any supporting documents are to be submitted, in any other language other than English, then translation of the same in English language, attested by the bidder should be attached.
10	Validity of tender offers	:	180 days from date of opening of Technical bid
11	EMD Amount	:	Rs. 1,50,000/-
12	Performance Security Deposit (for finalized bidder only)	:	10% of the contract value in the form of Bank Guarantee of any nationalized /Scheduled Bank having branch at Kolkata.
13	Address for Submission of Tender	:	The Director, Indian Maritime University, P-19, Taratala Road, Kolkata - 700088.

INDIAN MARITIME UNIVERSITY
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1. About Indian Maritime University:

The birth of Indian Maritime University is a long cherished dream of the maritime community of India. The Indian Maritime University, established through an Act of Parliament (Act 22 of 2008) in November 2008 as a Central University and headquartered at Chennai (herein referred to as IMU HQ), is poised to play a key role in the development of trained human resource for the maritime sector. IMU is an autonomous body under Ministry of Shipping, Govt. of India.

The following are the objectives of the University:

- (i) To facilitate and promote maritime studies, training, research and extension work with focus on emerging areas of studies like oceanography, maritime history, maritime laws, maritime security, search and rescue, transportation of dangerous cargo, environmental studies and other related fields, and also to achieve excellence in these and connected fields and other matters connected therewith or incidental thereto.
- (ii) To promote advanced knowledge by providing institutional and research facilities in such branches of learning as it may deem fit and to make provisions for integrated courses in Science and other key and frontier areas of Technology and allied disciplines in the educational programmes of the University;
- (iii) To take appropriate measures for promoting innovations in teaching-learning process, inter-disciplinary studies and research; and to pay special attention to the promotion of educational and economic interests and welfare of the people of India;
- (iv) To promote freedom, secularism, equality and social justice as enshrined in the Constitution of India and to act as catalyst in socio-economic transformation by promoting basic attitudes and values of essence to national development; and
- (v) To extend the benefits of knowledge and skills for development of individuals and society by associating the University closely with local, regional and national issues of development.

2. Invitation for Bids:

The Indian Maritime University Kolkata (hereinafter referred to as the Buyer or IMU KC) invites sealed tenders for Supply of ‘‘Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory’’ for Research in Industrial Applications (hereinafter referred to as the ‘‘Supply’’) under two cover system.

Type of Tender	Two cover system 1. Cover-I-Technical Bid 2. Cover-II- Price Bid
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Overall Scope and objective of this Tender is to select a successful bidder for supply, installation, commissioning, training & Annual Maintenance Contract.

2.1. EMD and Tender Fees:

Sl.No.	Particulars	Supporting document
1	Tender documents can be downloaded at free of cost from www.imu.edu.in/www.merical.ac.in	Nil
2	Bidder must have submitted EMD for Rs.1,50,000.00 (Rupees One Lakh Fifty Thousand only)	Demand Draft from nationalized / scheduled commercial bank.

2.2. Eligibility Criteria:

The bidder should have mandatory qualification as per the following table. The proposal of the bidders who are fulfilling the mandatory qualification criteria shall be considered for cover-II evaluation. The offer will be rejected if the bidder does not fulfil any one of the mandatory qualification criteria.

Sl.No	Qualification Criteria	Supporting documents
1	The Bidder should be in the Business of Providing ‘Similar Supply’ for a period not less than 5 years i.e. since 2013 – 14	Certificate of Incorporation / Registered partnership deed / Copies of the Work order, Agreement and Work Completion certificate for the Completed or ongoing supply – Proof for providing similar supply during 2013-14 or earlier to be enclosed.
2	The Bidder should have satisfactorily completed “Similar Supply” involving values as listed below during the last 5 financial years i.e. since 2013-14 (1) at least 1 Similar Supply with a minimum value of i.e. Rs. 60 Lakhs [OR] 2) at least 2 Similar Supply with a minimum value of Rs. 45 Lakhs [OR] 3) at least 3 Similar Supply with a minimum value of Rs. 30 Lakhs	Copies of the supply order, Payment advice, Certification from buyer entity.
3	The Bidder should have a positive net worth and an average annual turnover of at least Rs. 3.5 Crore during the past 3 financial years i.e. 2015-16, 2016-17 & 2017-18.	Annual accounts duly certified by a Chartered Accountant / Income tax Returns.
4	The Bidder should have a valid PAN and GST Registration Certificate.	Copy of the PAN Card and GST registration certificate.
5	The Bidder shall be the reputed Original Equipment Manufacturer (OEM) / their authorized / certified partner or authorized reseller. He shall furnish necessary authorization from the OEM	OEM Authorisation / Certification as per the Annexure III. In case of participation by OEM, self-declaration.

	and authorizing him to provide all goods and services support indicated in this tender and confirming that necessary assistance would be provided to him in providing required support during the Warranty Period.	
6	The Bidder should not have been black listed so far.	Self-declaration to this effect.

- 2.2.1.** ‘Similar Supply’ means supply of hardness testing equipment of the similar as per the tender with Government / Semi-Government/ Public Sector organizations/ National level educational institutes like IIT, IIM, NIT and Central Universities/ State Universities / Public Limited Companies. / Reputed UGC/ AICTE Recognized or private Sector Universities / Maritime training institutes and port organizations / Central Govt. Research laboratories such as CSIR / DRDO / ISRO.
- 2.2.2.** With regard to the various proof/supporting documents produced by the bidders for establishing that they meet the various eligibility conditions, it shall be IMU’s prerogative to decide whether the document produced is valid evidence or not and to call for additional proof, if required.
- 2.2.3.** All the Mode of Proof Documents for meeting eligibility criteria enclosed with the tender are to be duly signed by the authorized signatory. If required, IMU may insist for notarized copy or ask to produce originals to ascertain the veracity of the documents. IMU also reserves the right to ask more proof to corroborate the eligibility declarations.

2.3. Pre-bid Meetings Clarification:

IMU KC shall organize a pre bid meeting on the scheduled date, time and venue as mentioned in Tender Abstract, at Indian Maritime University P19, Taratala Road, Kolkata-700088. Bids of bidders who have not participated in pre-bid shall not be considered for further tendering process. The prospective bidders shall submit their queries in writing in prescribed format below in writing to the address mentioned in the invitation of tenders or E-Mail to dradmin.kolkata@imu.ac.in with a copy to director.kolkata@imu.ac.in, three days before the pre-bid meeting and the same shall be clarified during the pre-bid meeting.

Sl.No.	Clause No. & Page No.	Reference Clause Details	Clarification Sought

IMU KC may or may not incorporate any changes in the Tender document based on acceptable suggestions received during the Pre-Bid Conference. The decision of IMU KC regarding acceptability of any suggestion shall be final in this regard and shall not be called upon to question under any circumstances.

2.4. Response to queries and issue of amendments:

- 2.4.1.** IMU KC will respond to any valid request for clarification, received one week prior to the last date for submission of tender. IMU KC’s decision is final and binding with regard to interpretation of terms used or other tender contents.

- 2.4.2. IMU KC may, for any reason, suo motu or in response to a clarification by a prospective bidder or bidder, modify the tender documents by amendments (through addenda / corrigenda etc.)
- 2.4.3. Any such amendments will be informed to all the participants in the pre-bid meeting besides hosting on IMU website. All the bidders who had downloaded the Bid Document shall verify, whether any such amendments have been issued by IMU KC, before submitting their bid and shall take cognizance of and include such amendment(s) in their submission. In any case, the amendment(s), if any, shall be binding on the Bidder.
- 2.4.4. Any such corrigendum/addendum shall be deemed to be part or incorporated into this NIT.
- 2.4.5. In order to provide prospective bidders reasonable time for taking the Corrigendum/modifications into account, IMU KC may, at its discretion, extend the last date for the receipt of Bids. However, no such request in this regard shall be binding on IMU KC.
- 2.4.6. It is the responsibility of the bidder to check the website of IMU KC time to time for updates.

2.5. Language of Proposal & Correspondence:

The tender, and all correspondence and documents, related to the tender, exchanged between the bidder and IMU KC should be in the English language only. If the bidder along with their offer furnish any printed literature written in any other language, such documents should be supplemented with their English translation also. The contents in the English translated version alone shall be taken into consideration.

2.6. Tender Validity:

- 2.6.1. Tenders shall remain valid for 180 days from the last date for submission of tender. A proposal valid for a shorter period may be rejected by IMU KC as being non-responsive. During the period of validity of Proposals, the terms and condition mentioned shall not change and any such request may lead to denial of the award.
- 2.6.2. In exceptional circumstances, prior to the expiry of the original tender validity period, the IMU KC may request the bidder to extend the period of validity for a specified additional period. The request and the response thereof shall be made in writing through E-mail or Post. A bidder agreeing to the request will not be required to nor permitted to modify his tender, but will be required to extend the validity of his tender for the period of extension. In case a bidder is not agreeing to the request of the IMU for extension of validity of the tender, then his tender will not be processed further and the portions of his tender which have not been opened will be returned to them unopened as the case may be. The EMD paid by them will also be refunded to them as in the case of other unsuccessful bidders.

2.7. Proposal prices:

The prices indicated in the price schedule shall be entered in the following manner:

- i) The total price quoted must be inclusive of freight and insurance up to delivery, Installation, Commissioning, training, and up-gradation of software hardware and comprehensive AMC for 3 years immediately after expiry of 2 years warranty at IMU KC's Campus, excluding applicable GST.

- ii) Prices quoted as above shall be valid for a minimum period of 180 days from last date for submission of the tender.
- iii) It must be clearly understood that the prices quoted in the tender are to include everything required to be done as per the specification and the conditions of tender and supply for the proper execution of supply/works although special mention thereof may have been omitted in the specification. The specifications indicated are for minimum and shall include accessories etc. to make the system fully operational.
- iv) IMU KC has the right to change /increase / withdraw the quantities of any items in the tender prior to acceptance by the supplier of the work order issued by IMU KC.

2.8. Earnest Money Deposit (EMD):

- 2.8.1.** Tender should be accompanied by an Earnest Money Deposit (EMD) for the value stated in the Tender Abstract which shall be in the form of Demand draft from any Nationalized Bank / Scheduled Bank drawn in favour of “Indian Maritime University”, Payable at Kolkata. No other form/ mode of deposit towards Earnest Money shall be accepted. Tenders not accompanied by the Earnest Money Deposit in the manner prescribed by the IMU KC will be summarily rejected. However, exemption from EMD may be considered by IMU KC only upon written request enclosed with the technical bid duly enclosing the relevant and valid exemption certificates from MSME/NSIC. No exemption from payment of EMD is available to any bidder for any other reason whatsoever.
- 2.8.2.** The EMD of all unsuccessful bidders would be refunded by IMU KC within 90 days on selection of successful bidder. No interest will be allowed on the Earnest Money. The EMD of the successful bidder will be refunded only after the remittance of Security Deposit. Alternatively, the successful bidder shall when his tender is accepted, furnish Security Deposit as specified in the clause elsewhere after adjusting the amount deposited by him as earnest money. The earnest money shall retain its character as earnest money deposit, till the successful bidder furnishes the Security Deposit in full with or without adjustment of EMD.
- 2.8.3.** Where a person whose tender has been received by IMU KC intimates that he is withdrawing their tender before the validity period or makes any modification in the terms and conditions of the tender which are not acceptable to the IMU KC (or) fails to furnish the Security Deposit within the prescribed time, the IMU KC shall without prejudice to IMU KC’s any other right or remedy, be at liberty to forfeit the Earnest Money deposited by such person absolutely.

2.9. Submission of the Proposal:

The tender submitted by the Bidder shall comprise the following and should be read in conjunction with any Amendments issued at the time of submission of bid.

2.9.1. Cover-I (Technical Bid):

The Cover-I should comprise of following;

2.9.1.1. Earnest Money Deposit.

2.9.1.2. Tender Document downloaded from IMU-KC Website comprising Tender Notification, Abstract, General Rules and Directions for the Guidance of the bidder, General description of Supply and other terms and conditions, including the amendments, corrigenda / addenda issued by IMU KC which are duly signed by the

authorized signatory of the bidder in each page with stamp signifying the acceptance of all the tender conditions / terms / contents.

2.9.1.3. Duly filled Technical Bid format (Annexure II) and Supplier's OEM Authorization Form (Annexure III) with all the documents stated in the technical bids and other supporting documents in evidence of the data filled in technical bids and any other documents/enclosures/schedules/annexures etc. stated in the tender document.

2.9.1.4. Bidder Memorandum (Annexure IV) duly signed by the bidder.

2.9.1.5. The duly authorized signatory (ies) of the entity should sign and seal in all the pages of the tender document including the annexure / schedules signifying the acceptance of all the terms and conditions, stated in the various parts of the tender. The person(s) authorized to sign the tender shall also sign in all the pages of the supporting documents with office seal submitted as proof of their eligibility, proof of technical compliance etc. In other words, every page of the bid submitted should have the signature of the duly authorized signatory of the bidder with rubber stamp.

2.9.1.6. The Cover I shall be addressed to "The Director, Indian Maritime University Kolkata Campus" and should be duly super scribed as "Cover-I-Technical Bid for Supply of Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications" and sealed properly. Name and Address of the bidder shall also be written/ printed on the cover.

2.9.2. Cover-II(Price Bid)

2.9.2.1. The Cover II shall only contain the Price Bid formats given in Annexure – V & Schedule 1. It has to be duly filled in, signed and sealed.

2.9.2.2. The Cover II shall be addressed to "The Deputy Registrar, Indian Maritime University" and should be duly super scribed as "Cover-II-Price Bid for Supply of Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications" and sealed properly. Name and Address of the bidder shall also be written/ printed on the cover.

2.9.2.3. The Rate shall be filled in either typed or written in indelible ink and shall be signed by the person or persons duly authorized to sign on behalf of the bidder.

2.9.3. Main Cover:

Both the "Cover I" and "Cover II" shall be placed inside the main cover and sealed properly. The main cover should be duly super scribed as **Tender for Supply of "Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications"** and to be submitted in the following address which should reach on or before 21.02.2019 to the address:

**The Director,
Indian Maritime University,
P-19, Taratala Road,
Kolkata-700088.**

2.9.4. The bidder shall note that no alternative or counter or qualifying tender conditions by the bidder will be acceptable to IMU KC. Tenders containing any qualifying conditions or even bidder's clarifications in any form may be treated as non-responsive and will run the risk of rejection. In general, printed terms & conditions shall not be accepted.

2.9.5. Bidder who submits more than one tender will be disqualified.

2.10. Cost of Bidding:

The bidders shall bear all costs, efforts or their time associated with the preparation and submission of their bids and the IMU KC will in no case be responsible or liable for those costs / efforts / time, regardless of the conduct or outcome of the tendering process or the cancellation, if any, of tender by IMU KC, due to any reason whatsoever and at any stage of the tender (IMU KC is not responsible, if there is a cancellation even after price bid opening).

2.11. Completeness of Tender:

The Bidder is expected to examine all instructions, forms, terms, conditions and deliverables in the tender document. Failure to furnish all information required by the tender documents or submission of a tender offer not substantially responsive in every respect to the tender documents will be at the bidder's risk and may result in rejection of its tender offer. The tender offer is liable to be rejected outright without any intimation to the bidder if complete Information as called for in the tender document is not given therein, or if particulars asked for in the forms / proforma in the tender are not fully furnished.

2.12. Deadline for Submission of Proposals:

Tenders must reach the Director's office through speed post/ courier or to be dropped in to the box placed in the Director's Office, IMU KC, prior to the last date & time for submission, specified in the abstract. IMU KC may, at its sole discretion extend the date and time for submission of tenders. Any updates with regard to such extension or any other communication intended for the bidders / prospective bidders will be made only through IMU KC's website stated above. Any tender received after the last date and time for submission of tenders prescribed will be rejected.

2.13. Late Proposal:

Any proposal received by IMU KC after the deadline for submission of proposals prescribed by IMU KC, will be rejected and kept as an unopened Tender.

2.14. Modification and withdrawal of bids:

2.14.1. The bidder may be allowed to modify or to submit revised bid due to corrigendum, addendum, etc., issued by IMU KC, any time prior to the last date prescribed for receipt of bids, by giving a written notice to the IMU KC.

2.14.2. The bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in a manner similar to the original Proposal.

2.14.3. Subsequent to the last date for receipt of bids, no modification of bids shall be allowed. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the of bid validity period specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of bid security/EMD.

2.15. IMU KC's Right to accept and to reject any or all proposals:

Notwithstanding anything else contained to contrary in this Tender Document, IMU KC reserves the right to accept or reject any Bid or to annul the bidding process fully or partially or modifying the same and to reject all Proposals at any time prior to the award of work, without incurring any liabilities in this regard.

2.16. Rejection of Bids:

The bids will be rejected on following grounds:

- 2.16.1.** If any of the eligibility criteria as per the qualification criteria is not met
 - 2.1.1.** EMD not submitted / Not submitting exemption certificate of MSME/NSIC/exemption certificate not found suitable/approximate to requirement.
 - 2.16.2.** If tender terms and conditions are not met
 - 2.16.3.** If bidder gives wrong information in the bid
 - 2.16.4.** Canvassing in any form in connection with the bids
 - 2.16.5.** If the bid is incomplete /partial bid/ conditional/unclear in any form
 - 2.16.6.** Bids submitted after due date and time
 - 2.16.7.** Bids are submitted through Telex/Fax/ e-mail (i.e. modes other than by way of speed post/ courier/ dropping in the box provided)
 - 2.16.8.** Erasure and/or overwriting (if not countersigned by authorized person)
 - 2.16.9.** Bids not signed by authorized signatory

2.17. Evaluation Process:

- 2.17.1.** IMU KC shall evaluate the responses to the NIT and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
- 2.17.2.** The interpretation of the bids and the decision made by the IMU KC in the evaluation of responses to the NIT shall be final. No correspondence will be entertained outside the process of evaluation with IMU KC.
- 2.17.3.** IMU KC may ask for meetings with the bidders to seek clarifications on their bids.
- 2.17.4.** IMU KC reserves the right to reject any or all bids on the basis of any deviations.
- 2.17.5.** Each of the responses shall be evaluated as per the criteria and requirements specified in this NIT.

2.18. Tender Evaluation:

- 2.18.1.** Technical bids will be opened at the IMU KC, located at the address stated in tender abstract. Any bidder who is willing to observe the tender opening, may, in person or through his authorized representative (maximum one personnel on production of authorization letter), be present at the venue and witness the tender opening.
- 2.18.2.** The bidder or his authorized representative who are present shall sign a register evidencing their attendance. IMU KC reserves the right to reschedule the tender opening date (technical / financial bid opening) if the scheduled tender opening day is declared as a holiday for the IMU KC or due to any other administrative reasons which would be published in IMU KC website and such rescheduling may not be communicated individually in any other modes.
- 2.18.3.** Technical bid (Cover-I) of each bidder shall fulfil the minimum eligibility criteria prescribed in NIT.
- 2.18.4.** The information furnished by the bidder in Cover - I in the format(s) prescribed as part of the tender document by IMU KC will form the basis for the technical evaluation. In exceptional cases, IMU KC reserves the right to obtain any clarifications from any of the bidder. If, in the opinion of the IMU KC, information and documents supplied in support of the tender do not meet the minimum eligibility criteria as per NIT and the any or some of the technical specifications as per NIT, as determined by IMU KC, the tender / product offering will be treated as non-responsive and rejected by the IMU KC and their Cover II – Price bid shall not be opened for evaluation. The IMU KC's decision is final and binding, with regard to technical evaluation.
- 2.18.5.** After satisfying that all / or some of the bidders have attained the minimum qualifying technical criteria as detailed above, bids of only such technically qualified

bidders i.e. which fulfil all the qualification / eligibility criteria and also comply with the technical specifications, will be considered for further evaluation. A suitable date and time for opening of the Cover II – Price Bids will be fixed and those bidder(s) who are technically qualified will be intimated through email about the opening of Cover - II – Price Bids or alternatively, the date may be published in IMU KC website. Other procedures for opening the cover II including the witnessing (by only the technical qualified bidders) the tender opening event, no. of participants etc., will be similar as those for cover-I explained in the earlier para(s).

2.18.6. Price bid evaluation will be made based on Price inclusive of freight and insurance up to delivery, Installation, Commissioning, training, and up-gradation of software hardware and AMC for 3 years immediately after expiry of 2 years warranty at IMU KC, excluding applicable GST. IMU KC also reserves right to change quantities before issuing the order, due to exigencies, if any. The destination point for delivery of materials will be as follows:

Quantity in Nos	Consignee
01 Each	The Director, IMU Kolkata Campus, P-19, Taratala Road. Kolkata: 700 088. West Bengal, India.

2.18.7. After evaluating the price bids received under Cover II, the bidder who quoted the lowest (L-1) Price will be awarded the work.

3. General Conditions of Contract:

3.1. Execution of Contract:

The successful bidder has to enter in to an agreement with IMU KC incorporating all clauses of the Tender document and any other as may be agreed to by both the parties on a Non-Judicial Stamp Paper of Rs. 100/-.

3.2. Termination Clause:

- 3.2.1. In the event of the breach of any of the provisions of contract by the supplier, IMU KC shall have the right to terminate the tender summarily, at any stage.
- 3.2.2. In the event of IMU KC terminating the contract for breach by the supplier of any of the provisions thereof, the supplier shall be liable for any loss suffered by IMU KC up to the time of the termination of the contract.
- 3.2.3. In the event of the death, insanity or insolvency of the supplier IMU KC shall have the right to terminate the contract summarily and to purchase in the open market any Goods/ Services covered by the contract. In this case, the supplier shall not be liable for any excess in the price paid, for any such purchases over the tender price.
- 3.2.4. In the event of failure to carry out the work assigned under the contract to satisfaction on IMU- Kolkata, IMU-KC reserves the right to get the work done through alternative sources, at the risk and cost of the contractor.

3.3. Security Deposit:

- 3.3.1. The supplier shall be required to submit the performance security in the form of account payee demand draft drawn in favour of Indian Maritime University Kolkata Campus payable at Kolkata or irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount of 10% of the Purchase Order value within 7 days from the date of receipt of the purchase order and should be kept valid for a period of 90 days beyond the date of completion of warranty period and AMC period. It may also be required to be extended in the event of extension of AMC period.
- 3.3.2. Security Deposit will be refunded / returned without any interest only 90 days after successful completion of warranty period. The refund or return of Security Deposit is subject to the complete fulfilment of the contract obligation by the supplier to the satisfaction of IMU KC and after adjustment of dues to IMU KC or penalty imposed by IMU KC.

3.4. Delivery Period:

The bidder is required to delivery, installation, testing, Commissioning and starting of operation of the hardness testing equipment s in all aspects within 45 **days** from the date of work order at designated IMU KC Campus.

3.5. Inspection & Rejection:

The supply shall be subject to inspection by IMU KC and IMU KC's decision as to the acceptance of any equipment or rejection of any equipment / goods as not conforming to specification, shall be final and binding on the successful bidder. Such of the equipment / goods which are rejected shall be removed by the successful bidder at their own expense and replaced by fresh ones within a time, as determined by IMU KC.

3.6. Liquidated Damages:

If the successful bidder fails to execute the Supply/Works in all respects within the period specified or within such extended period as may be allowed, the successful bidder shall pay a sum equivalent to 0.5% of the value of the total tender price per week (Seven days) or part thereof subject to a maximum limit of 10% of the value of the each of the item tender as liquidated and ascertained damages. IMU KC shall have the right to determine what the "amount payable/corresponding payment" for any step/activity is, and while the Successful Bidder has a right to represent/clarify, IMU KC's determination of the same shall be final without prejudice to the Successful Bidder's rights to seek alternative remedy through arbitration/Courts.

3.7. Comprehensive Onsite warranty:

- 3.7.1. A comprehensive onsite warranty for the supplied equipment shall be provided by the supplier for a minimum of two year from the date of final acceptance of the equipment by IMU KC. The supplier will be notified of any defect or claim arising under this warranty and the warranty support shall be provided at site of IMU KC Campus.
- 3.7.2. If the supplier having been notified fails to remedy the defect within 7 days, IMU KC may proceed to take such remedial action as may be necessary at the supplier's expense. The period that the equipment is out of commission / operation as a result of supplier's failure to remedy the defects notified shall result in extension of the warranty period correspondingly and imposition of penalty (Rs. 10000/- per instance which will be adjusted from the Security Deposit or any other dues to the supplier).

3.8. Comprehensive Onsite AMC:

- 3.8.1. Comprehensive maintenance for 3 years is to commence immediately after the expiry of the comprehensive warranty period.
- 3.8.2. The supplier shall provide necessary comprehensive preventive and corrective maintenance on site i.e. by sending the engineer to the IMU KC Campus for attending the maintenance requirements of the supplied equipment. In case of intimation of break-down, the equipment should be restored to normal working condition within a maximum of 7 working days during the period of maintenance. All spares which need replacement during the period of onsite maintenance are to be replaced without any additional cost. Any exception required with regard to the spares to be replaced to be intimated during the pre-bid meeting or by email within 15 days of notification of the tender to the above said email addresses. The conditions specified for warranty may also be applied by during AMC period and vice-versa.
- 3.8.3. In addition to above, support should also be available by phone, e-mail to solve the problem as soon as possible during the period of Warranty and Annual Maintenance Contract. He shall have an office with sufficient service engineers trained to provide support services. The Bidder shall also have sufficient spares on hand for providing the uptime as indicated in this tender.

3.9. Payment Terms:

- 3.9.1. The Supplier shall be paid 100% of payment against Supply, Installation, Commissioning, Acceptance Testing, Training and putting in to operation of hardness testing equipment s at designated IMU KC Campus against the invoice. IMU KC will, after verification of the claim for its correctness, make payment within thirty days after the date of receipt of the claim, complete and correct in all respects, from the supplier.
- 3.9.2. The Tax Invoice raised by the supplier must be in compliance of relevant GST acts, rules & notifications made there under and should bear the **IMU KC GST Registration no. 19AAAI2610K1ZU**. The rate and amount of CGST, SGST, IGST and GST (Compensation to state) cess, related to supply of goods, shall be shown separately in tax invoice for each item of supply.
- 3.9.3. **Statutory variation:** If there is any statutory change in CGST & SGST or IGST within contractual delivery period, the same shall be admissible and will be paid at actual based on the documentary evidence. However, no upward revision in the same beyond original delivery period shall be admissible.

3.10. Ownership of License:

Licenses for all the software including Anti-Virus supplied along with the equipment under the scope of supply shall be in the name of IMU KC. All documents and reports prepared or obtained in performing the hardness testing equipment shall become and remain the property of IMU KC.

3.11. Secrecy :

The Supplier shall not transfer any part or share of his responsibilities directly or indirectly to any person whomsoever without the written consent of IMU KC.

3.12. Force Majeure:

- 3.12.1. The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or

other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

- 3.12.2. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, earthquakes, meteorite strike, quarantine restrictions and freight embargoes.
- 3.12.3. If a Force Majeure situation arises, the Supplier shall promptly notify the IMU KC in writing of such conditions and the cause thereof. Unless otherwise directed by the IMU KC in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

3.13. Indemnity:

The selected bidder shall indemnify IMU KC from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind how-so-ever suffered including patent, copyright, trademark and trade secret, arising or incurred inter-alia during and after the Contract period out of:

- 3.13.1. Negligence or wrongful act or omission by the Selected Bidder or its team or any Agency/ Third Party in connection with or incidental to this Contract; or
- 3.13.2. Any breach of any of the terms the Selected Bidder's Proposal as agreed, the Tender and this contract by the Selected Bidder, its Team or any Agency/ Third Party.
- 3.13.3. Bidder (the "Indemnifying Party") undertakes to indemnify the client (the "Indemnified Party") from and against all losses, claims for damages including losses, claims for damages on account of bodily injury, death or damage to tangible.
- 3.13.4. The indemnity shall be to the extent of 100% of project cost in favour of the IMU KC.

3.14. Arbitration & Jurisdiction:

In the event of disputes, differences, claims and questions arising between the parties hereto arising out of this Agreement or anyway relating hereto or any term, condition or provision herein mentioned or the construction or interpretation thereof or otherwise in relation hereto, the parties shall first endeavour to resolve such differences, disputes, claims or questions by mutual discussion and failing such settlement, the same shall be referred for arbitration by a sole Arbitrator appointed by IMU KC / IMU HQ. Such arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act 1996 or re-enactment thereof for the time being in force and shall be held in Kolkata. In case the Arbitration award is not acceptable to either of the parties, they may approach courts having jurisdiction at Kolkata only.

3.15. Applicable Law:

The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction of Kolkata Courts only.

4. Special Conditions of the Tender:

4.1. Site Preparation:

The supplier shall visit the IMU KC Campus and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements. The operating environment is Tropical condition with commercially available split Air Conditioners.

4.2. Supply of Equipment:

The supply shall include complete set of equipment including accessories and spares as described in the subsequent paragraphs of the “Technical Specification” (Annexure I)

4.3. Installation, Demonstration and User Acceptance Testing:

- 4.3.1. The supplier is required to do the installation and demonstration of the equipment within 10 days of the arrival of materials at the IMU KC’s site of installation; otherwise the penalty clause will be the same as per the supply of materials.
- 4.3.2. The successful Bidder shall depute their Service Engineer for demonstration or calibration of the equipment. The Service Engineer shall demonstrate operation of equipment to the satisfaction of respective IMU KC Campus. IMU KC may request to demonstrate the functioning of the equipment, after installation, by asking to perform a few experiments and verification of the results either by theoretical or other practical means.
- 4.3.3. In case of any mishap /damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his claim with the insurance company as per his convenience. IMU KC will not be liable to any type of losses in any form.
- 4.3.4. The demonstration proposed to be done by the bidder in proof of correct working of the entire set up both individually and as an integrated system has to be specified in the technical bid format in Annexure. Such demonstration should be acceptable to IMU KC. If the demonstration proposed by the bidder is not acceptable to IMU KC, at its discretion either reject the tender or alternatively ask the bidder to do some other demonstration which found by IMU KC, to be more appropriate.

4.4. Inspection and Tests:

The compliance of the equipment with the requirements mentioned in Technical specifications and elsewhere in Tender document should be verifiable with supporting documents like OEM’s manual, Certification from OEM etc. the certificate should be valid.

- 4.4.1. The above tests shall demonstrate the satisfactory operation of integrated system covering the full range of facilities of the equipment.
- 4.4.2. The acceptance tests for supplied goods shall be carried out at IMU KC by the supplier with the participation of concerned personnel from IMU KC.
- 4.4.3. In case of the acceptance tests are not concluded to the satisfaction of IMU KC the supplier shall repair or replace, at the supplier’s cost, the whole or any part of the equipment as may be necessary for conclusion of the acceptance tests to the satisfaction of IMU KC within the reasonable period agreed by IMU KC. Demonstration of performance of the equipment should be done after such repair / replacement for acceptance of IMU KC.
- 4.4.4. IMU KC reserves the right to accept the delivered items with deviations, provided the supplier agrees to rectify the deviations within an acceptable time period. Regarding the acceptance date, decision of IMU KC would be final.

- 4.4.5. The supplier shall provide necessary consumables till the completion of acceptance testing, without any additional cost.
- 4.4.6. The All parts and equipment should be brand new and unused. Refurbished items shall not be provided.
- 4.4.7. The equipment shall be robust for academic use and shall have to produce results with accuracy, as determined reasonable by IMU KC.

4.5. Availability of Spare Parts:

The Supplier may be required to provide any or all the notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- 4.5.1. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- 4.5.2. In the event of termination of production of the spare parts:
- 4.5.3. Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
- 4.5.4. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.
- 4.5.5. Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods. Other spare parts and components shall be supplied as promptly as possible but in any case within one month of placement of order.
- 4.5.6. The Successful Bidder shall stand guarantee for the supply of spares of all the equipment under the scope of supply for a minimum period of 10 years from the date of awarding the contract and also guarantee that discontinuity of production of any item offered as a part of the system shall not affect the maintainability of the system for a period of 10 years from the start date of operation.

4.6. Replacement of Defective Equipment:

If any of the equipment supplied by the supplier is found to be substandard, refurbished, unmerchantable or not in accordance with the description/specification or otherwise faulty, the IMU KC will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the supplier with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 30 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IMU KC may consider 'Banning' the supplier and any other remedies, as deemed fit by IMU KC.

4.7. Supply of Manuals & Drawings:

- 4.7.1. Two Sets of operation and maintenance instruction manuals for each hardness testing equipment shall be supplied designated Campus of IMU KC.
- 4.7.2. Complete technical and functional specifications, operation and maintenance manual for each hardware / cards on the equipment with part numbers and model de-codification documents, to be supplied in original, photocopy is not acceptable.

- 4.7.3. Complete engineering details of each system as required for the purpose (experiments and research) the equipment's are bought.
- 4.7.4. Complete system wiring details, input, output, wiring details as applicable to the scope of supply.
- 4.7.5. Operation and maintenance manuals for the scope of supply including computers, Data Acquisition Units, interface devices etc. (to be supplied in original, photocopy is not acceptable)
- 4.7.6. The party shall supply all the software with proper license (including Windows, PC-Motherboard drivers (as applicable to the supplied electronic data acquisition units), and any other software as required.
- 4.7.7. One set of service agents and depots lists shall be supplied along with the equipment.
- 4.7.8. In addition to the Manuals given by the Manufacturers, the successful Bidder shall prepare full documentation.

4.8. Documentation:

- 4.8.1. The successful bidder shall provide IMU KC with necessary documents including the following:
 - 4.8.1.1. Operational and Maintenance Manuals of equipment.
 - 4.8.1.2. Equipment serial numbers and models.
 - 4.8.1.3. Test Certificates, Licenses if any.
 - 4.8.1.4. Acceptance test results and acceptance status.
 - 4.8.1.5. Training Material.
 - 4.8.1.6. Full documentation with the software.
- 4.8.2. Four sets of hardcopy of the above shall be handed over to nominated personnel of IMU KC. Soft copy of the documents shall also be provided where applicable. Handing over of documents to IMU KC by supplier is a pre-requisite for Acceptance.
- 4.8.3. Manuals for the instruments are to be supplied with respect to operation, maintenance, ordering spares / technical services.

4.9. Power Tolerance:

The equipment or its battery charger shall operate correctly from a 220 or 440 Volts (+/-10%) and 50 Hz (+/-6%) power supply 1Ph/3Ph. It should be capable of withstanding permissible voltage and frequency variations without any damage to the equipment or loss of the information.

4.10. Data Storage capability:

The equipment should be capable of storing sufficient measured data history in the equipment or its supported PC and should be able to transfer the data stored into a computer. The scope of supply includes all means by way of drivers, software and interface cables and adapters to facilitate such transfer.

4.11. Training and Support:

- 4.11.1. The supplier shall impart training to four persons at each IMU KC Campus on operation of the hardness testing equipment s. The training shall be imparted in a phased manner without disrupting the working of the each Campus. The training will be conducted as and when software/hardware upgraded or any other parameters altered by the Manufacturer/Supplier. Periodical refresher training may need to be imparted.

- 4.11.2. The supplier shall make his own arrangements for supplying training material, equipments required for training etc.
- 4.11.3. IMU KC Campus will provide necessary space, infrastructure free of cost for conducting the training.
- 4.11.4. The training provided by the supplier shall cover:
 - a) Operation of the equipment along with course/reference material for each individual.
 - b) Operational level training along with course/reference material for each individual.
- 4.11.5. On completion of training, the supplier shall submit an evaluation report on the participants along with course details.
- 4.11.6. Completion of training is a pre-requisite for acceptance of the equipment.
- 4.11.7. All charges pertaining to the training shall be part of the price bid.
- 4.11.8. Support the operators through help desk (online plus telephonic support) and visits to the sites (at his own cost) as may be required. The number of visits may be specified in the pre-bid meeting if any questions are raised on this.
- 4.11.9. Indicate willingness to arrange for visit by a team from IMU KC to any of the existing installations and share the contact details of the key personnel of that institution.

4.12. Acceptance of Equipment:

- 4.12.1. The activity shall deem to have been completed with the completion of Supply, Installation, Commissioning, Training and putting in to operation of “Electric Overhead Travelling Crane 5 ton” at IMU KC. However, the supply shall be complete only upon certification to this effect issued by IMU KC’s Consignees i.e. the Director – IMU KC.
- 4.12.2. Upon completion of Supply / work and after successful completion of other prerequisites like acceptance testing, Training etc., as prescribed in this document, IMU KC shall receive a written undertaking from the supplier that the supply / works have been completed and accordingly a certificate of completion would be issued in respect of the supply/works. The warranty period for the supplied system would commence from the date of Acceptance by IMU KC.
- 4.12.3. The equipment should meet necessary local & national administration requirements with regard to safety of people. Necessary certificates for SWL must be provided validated by a competent body.
- 4.12.4. IMU may request a load test at site and full functionality demonstration on successful completion of the works.
- 4.12.5. The vendor apart from submitting valid documents and certificates to comply with safety norms / working practices as required by Govt. Of India / Govt. Of West Bengal, should also demonstrate working of the various safety interlocks upon installation.

4.13. Bidder’s Representations And Warranties:

The selected bidder has to confirm to the IMU KC that:

- 4.13.1. He has the capability to duly perform its obligations in accordance with the terms of the tender and to the satisfaction of the IMU KC. However, that the IMU KC’s judgment in this regard shall be final and binding on the Bidder.
- 4.13.2. The execution of the Supply, Installation, Commissioning, Training and putting in to operation of equipmentators at designated IMU KC Campus by the Bidder to does not and will not violate, breach any covenants, stipulations or conditions of any Agreement, Deed entered into by the Bidder with any third parties.

4.13.3. Bidder shall abide by all laws of the land including, Companies Act, Taxation laws, and all other statutory and other obligations applicable to this contract for supply and IMU KC will not be responsible non-compliance, if any, by the supplier, in any way what-so-ever.

4.13.4. Provide the software updates free of charge under AMC.

4.14. Bidder's Covenants:

4.14.1. The Goods/ Services to be supplied by the bidder shall be of the quality or sort specified and in every respect equal and answerable to the specifications sent with the tender and shall be subject to the approval of the IMU KC.

4.14.2. Supply, Installation, Commissioning, Training and putting in to operation of hardness testing equipment at IMU KC is to be completed, free of delivery charges as per specified time on Door delivery basis.

4.14.3. Rejected Goods shall be removed by and at the expenses of the bidder within seven days after notice. If not taken away so, the IMU KC may seize the goods or remove the materials on its own and charge the bidder with all expenses incurred on such removal.

4.14.4. Any notice to the successful bidder shall be deemed to be sufficiently served, if given or left in writing at his usual or latest known place of business or sent to the email address specified in the bid submitted.

4.14.5. In these conditions unless there is something in the subject or context inconsistent there with words importing the singular shall include the plural and vice-versa words importing the masculine gender shall include the feminine and the words importing persons shall include bodies corporate/firms etc.

Director

NOTE:

- 1. For all the machines, the requirements of the testing equipment, accuracy, repeatability and reproducibility requirements should meet the ISO / ASTM / NIST / IS standards. OEM certificate / competent certifying body must provide a certificate in this regard.**
- 2. The equipment must meet and comply with the standards and a certificate of compliance from OEM in this regard is a must. Such as - ASTM E110 – 14 etc., and the equipment must be able to comply with methods such as ASTM E92 – 17 / ASTM E384 – 17 / ASTM E10 – 15 etc.**

(1) Brinell Hardness Testing Machine

The Brinell hardness test method is used to determine Brinell hardness. Most commonly it is used to test materials that have a structure that is too coarse or that have a surface that is too rough to be tested using another test method, e.g., castings and forgings. Brinell testing often use a very high test load (3000 Kgf) and a 10 mm wide indenter so that the resulting indentation averages out most surface and sub-surface inconsistencies.

Brinell hardness test consists of forcing a hardened ball into surface of a test piece with a specified test force and measuring the diameter of indentation for evaluation of Brinell hardness number.

Technical Specifications and Features Required:

Total Load (Kgf)	50 to 3000
Max. Test Height (mm)	380 or better
Depth of Throat (mm)	200 or better
Maximum depth of elevating screw below base(mm)	180 or better
Machine height	1185 mm or better
Dwell timer	1-99 seconds
Measuring Accuracy with CCD camera and built in optics	0.01 mm
Raising/Lowering	240 mm/min
Power Supply	220 or 440 Volts (+/- 10%) and 50 Hz (+/-6%) power supply 1Ph/3Ph.

Additional accessories	<ul style="list-style-type: none"> • Testing table 200mm dia. (01) • Testing Table 70mm dia. (01) • Ball Holder 5mm (01) • Ball Holder 10mm (01 set) • Test Block HB-5/750 (02) • Test Block HB-10/3000 (02) • Telescopic Cover for elevating screw protection (01) • Software (01) • Instruction manual (02) • Machine Cover (01)
Software	<ul style="list-style-type: none"> • Advanced Window based software or equivalent • Latest GUI features with user friendly software. • On line indentation setting and focusing on PC monitor. • Advanced image processing: Algorithms implemented for precise calculations of hardness numbers with various options to cover all ranges of specimens. • Batch files processing: Option for data/storage and reports generation. • Statical Evaluation: Software for calculating standard deviation, mean, medium, frequency distribution graph, variation graph etc. • Calibration mode facility. • Extendibility for future advanced image processing analysis, requirements. • Auto measurement start from machine.
Computer System	<ul style="list-style-type: none"> • PC desktop (Dell/HP/Lenovo) capable of supporting the system software and also interfacing with the controller hardware. • At least Intel i5 7th generation or equivalent processor. • At least 8 GB RAM. • Minimum 1 TB hard drive, with DVD read-write drive, SD card reader. • Internal Graphics, VGA and 2 Display Port. • 2 Button USB Scroll Optical Mouse and QWERTY Key board (US English). • 4 External USB 3.0 ports & 6 External USB2.0. • HDMI port, Ethernet port and wifi capable and 20 inch or better HD monitor with HDMI cable. • Windows 10 Professional operating system or equivalent (English). • 32 in Wide Screen Flat Panel Monitor. • Power supply: 220/240V Single Phase AC 50 Hz (Indian Standard). <p>Full details of each component to be provided.</p>

Support- Installation, Commissioning & Service	<ul style="list-style-type: none"> • Complete Installation should be performed by the OEM trained Service Engineer / Representative. • Training should be imparted to IMU nominated staff at least 5 No.s on the complete operation, care and maintenance of the all system components, software and hardware. Training should necessarily include calibration, safety, emergency stops / shutdown and all the don'ts with the system. A complete demonstration / training of mounting jobs on various fixes / jaws, testing and interpreting results etc., should be covered.
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(2) Rockwell Hardness Testing Machine

The Rockwell scale is a hardness scale based on indentation hardness of a material. The Rockwell test determines the hardness by measuring the depth of penetration of an indenter under a large load compared to the penetration made by a preload. There are different scales, denoted by a single letter, that use different loads or indenters. The result is a dimensionless number noted as HRA, HRB, HRC, etc., where the last letter is the respective Rockwell scale. When testing metals, indentation hardness correlates linearly with tensile strength. This important relation permits economically important non-destructive testing of bulk metal.

Rockwell Hardness Testing Machine consists of forcing an indenter (Diamond or Ball) into the surface of a test piece in two steps i.e., first with preliminary test force and thereafter with additional force and then measuring depth of indentation after removal of the additional test force (remaining preliminary test force active) for measuring of hardness value.

Technical Specifications and Features Required:

Total Load (Kgf)	15, 30, 45, 60, 100, 150
Minor Load (kgf)	3, 10
Max. Test Height (mm)	230
Depth of Throat (mm)	135
Operation Cycle	Automatic Load/Dwell/Unload
Scale	A,B, and, C
Test Force Selection	By external dialing
Set Position	With LCD bar indicator
Key board entry	Through membrane switches for scale, GO-NO GO & dwell time

Resolution	0.1 Rockwell
Power Supply	220 or 440 Volts (+/- 10%) and 50 Hz (+/-6%) power supply 1Ph/3Ph.
Additional accessories	<ul style="list-style-type: none"> • Testing table 50 mm diameter (01) • Testing Table 38 mm diameter with ‘V’ groove for round jobs of 6 to 45 mm diameter (01) • Diamond Indenter-Rockwell (02) • Steel Ball Indenter 1/16” with 5 spare balls (1 set) • Steel Ball Indenter 1/8” , 1/4”, 1/2” with 5 spare balls (1 set) • Test Block Rockwell ‘C’: 20-25 HRC, 35-45 HRC, 55-65 HRC (one each, total 3) • Test Rockwell ‘A’ :< 30, 50-60, 80-90 HRA (one each, total 3) • Test Rockwell ‘B’ : 20- 30 HRB, 50-60 HRB, 80-90 HRC (one each, total 3) • Test Block HR 30 N(02) • Allen Spanners (05) • Wooden Box for Accessories (01) • Telescopic Sleeves for Elevating screw protection (01) • Spare Fuse 1 Amp (10) • Power Cable (01) • Instruction manual (02) • Machine Cover (01) • Screw Driver (01) • Clamping Device (01)
Support- Installation, Commissioning & Service	<ul style="list-style-type: none"> • Complete Installation should be performed by the OEM trained Service Engineer / Representative. • Training should be imparted to IMU nominated staff at least 5 No.s on the complete operation, care and maintenance of the all system components, software and hardware. Training should necessarily include calibration, safety, emergency stops / shutdown and all the don’ts with the system. A complete demonstration / training of mounting jobs on various fixes / jaws, testing and interpreting results etc., should be covered.

(3) Vicker Hardness Testing Machine

The Vickers hardness test method consists of indenting the test material with a diamond indenter, in the form of a right pyramid with a square base and an angle of 136 degrees between opposite faces subjected to load. The

full load is normally applied for 10 to 15 seconds. The two diagonals of the indentation left in the surface of the material after removal of the load are measured using a microscope and their average calculated. The area of the sloping surface of the indentation is calculated. The Vickers hardness is the quotient obtained by dividing the Kgf load by the square mm area of indentation.

The Vickers hardness testing machine is a simple and accurate means to produce and measure the diamond indentation. The machine is suitable for measuring the hardness of precision metallic parts with wide testing range – from soft to hard.

Technical Specifications and Features Required:

Total Load	1, 5, 10 ,20, 30, 50 Kgf
Digital Hardness value Measurement through PC	Yes
Diagonal Measuring Range (mm)	0.05-0.4
Max. Test Height (mm)	200 or better
Depth of Throat (mm)	135 or better
Optical Measuring Range	0.1-1 mm
Scale Least count(mm)	0.001
Standard	IS 1754-2002 or above
Power supply	220 or 440 Volts (+/- 10%) and 50 Hz (+/-6%) power supply 1Ph/3Ph.
Features	<ul style="list-style-type: none"> • Online indentation setting and focus on PC monitor • User friendly software with windows features • Direct & accurate measurement of Vickers hardness number using “State of the art” image processing technology • Motorized loading and unloading cycles.
Additional accessories	<ul style="list-style-type: none"> • Standard Test Block (01) • Diamond Indenters (02) • Weights (2 sets) • Flat anvil (01) • Vee type Anvil (Big & small) (01each) • Spanners (02) • Electric cord & PC interface cord (01) • Video capture (01)

	<ul style="list-style-type: none"> • Software (01) • Instruction manual (02) • Machine Cover (01) • Reference Test Blocks
Computer System	<ul style="list-style-type: none"> • PC desktop (Dell/HP/Lenovo) capable of supporting the system software and also interfacing with the controller hardware. • At least Intel i5 7th generation or equivalent processor. • At least 8 GB RAM. • Minimum 1 TB hard drive, with DVD read-write drive, SD card reader. • Internal Graphics, VGA and 2 Display Port. • 2 Button USB Scroll Optical Mouse and QWERTY Key board (US English). • 4 External USB 3.0 ports & 6 External USB2.0. • HDMI port, Ethernet port and wi-fi capable and 20 inch or better HD monitor with HDMI cable. • Windows 10 Professional operating system (English). • 32 in Wide Screen Flat Panel Monitor. • Power supply: 220/240V Single Phase AC 50 Hz (Indian Standard). <p>Full details of each component to be provided.</p>
Support- Installation, Commissioning & Service	<ul style="list-style-type: none"> • Complete Installation should be performed by the OEM trained Service Engineer / Representative. • Training should be imparted to IMU nominated staff at least 5 No.s on the complete operation, care and maintenance of the all system components, software and hardware. Training should necessarily include calibration, safety, emergency stops / shutdown and all the don'ts with the system. A complete demonstration / training of mounting jobs on various fixes / jaws, testing and interpreting results etc., should be covered.

(Technical Bid-Cover 1)

[On the Letter head of the Bidder and to be put in a separate sealed cover]

Tender for Supply of ‘Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications’ at Indian Maritime University Kolkata Campus.

Ref: IMU/KC/BRV-Mat dated 31.01.2019

From

Name & Address of the Bidder

Ph:

Email:

To
 The Director,
 Indian Maritime University,
 P-19, Taratala Road ,
 Kolkata – 700088.

Dear Sir,

We hereby submit our Technical Bid for Supply of ‘‘Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications’’ at Indian Maritime University Kolkata Campus.

1. Compliance Statement:

Sl. No	Item Description	Compliance to Specification Yes/No
1	Whether the bidder could supply the hardness testing equipment s as per the technical specification in Annexure I and as per NIT	

2. Experience in the business of providing Similar Supply Since 2013-2014 or earlier:

Sl	Eligibility Criteria details	Bidders Confirmation
1	Whether in the business of Providing Similar Supply Since 2013-2014 or earlier & meet this eligibility criteria (Yes / No)	
a)	Since which Year?:	
b)	Mode of Proofs enclosed:	Page No.
(i)		
(ii)		
(iii)**		

** - May add more rows as required

3. A. Similar Supply with minimum value specified in any one of the three set of values (a or b or c) carried out during the last five financial years (2013-14 to 2017-18):

Sl. No	Eligibility Criteria details	Bidders Confirmation
A	Whether carried out similar supply with minimum value specified in any one of the three set of minimum value of contract (a or b or c) during 2013-2014 to 2017-18 & thereby meet this eligibility criteria (Yes / No)	
a)	At least one similar supply with a minimum value of Rs.60 lakhs: (Yes / No)	
b)	At least two Similar Supply with a minimum value of Rs.45 lakhs each (Yes / No)	
c)	At least three Similar Supply with a minimum value of Rs.30 lakhs each (Yes / No)	

3.B. Details of similar supply with minimum value specified in any one of the three set of values (a or b or c) carried out during the last five financial years (2013-14 to 2017-18) [in proof of sl. No. 3-A above]:

Sl. No.	Client-Name Address	Equipment supplied commissioned	Work order ref	Value of supply (Rs. in Lakh)	Date of commissioning by Bidder	Present Operational Status

** - May add more rows as required

4. Minimum Average Annual turnover:

Sl. No.	Eligibility Criteria details	Bidders Confirmation	
(i)	Whether the bidder has an average annual turnover of at least Rs. 3.5 Crores during the past 3 financial years i.e. 2015-16, 2016-17 & 2017-18. (Yes / No)		
	Year / Proof enclosed	Turnover	Page No.
(ii)	2015-16 /		
(iii)	2016-17 /		
(iv)	2017-18/		

Other Eligibility Criteria & Essential requirements and details:

Sl. No.	Particulars	Bidders Confirmation / Details	Details of Proof enclosed	Page No.
5.	Whether the Bidder have a valid PAN and GST Registration [YES / NO]		Copy of PAN & GST Registration Certificate enclosed	
6.	Whether the Bidder has been debarred or blacklisted by any Government department / agency so far on account of fraudulent or corrupt practices or inefficient / ineffective performance [YES/NO]		Declaration to this effect	
7.	Whether the Bidder has attached EMD for an amount of Rs.1,25,000/- from Nationalized or scheduled bank [YES/NO]		Original DD No. _____ enclosed with technical bid	
8.	OEM Authorisation certificate – Annexure - III		Yes / No	
(c)	Other Modes of Proof enclosed			

	<u>Name, Designation, Address and Telephone No. of Authorized person(s) of Firm / Agency:</u>	
	Type of the Organisation (Sole Proprietorship / Partnership / Pvt Ltd Co / Public Ltd Co. etc.	
	Name of the Authorised Signatory with Designation	
	Address of the Bidders	
	Email Address	
	Contract Numbers	
	Any other Remarks from Bidders:	
	Specific site preparation / site infrastructure required for effective functioning of equipment required (Yes/ No). If yet to be detailed in this column or to be enclosed.	

I am also enclosing bidder memorandum and undertaking duly signed by me /us.

Declaration

I / We certify that all the particulars furnished above are true and correct and based on documentary evidence, and that I /we understand that if any of the above particulars is found to be false or misleading, our bid is liable to be summarily rejected at any stage and my /our firm is liable to be blacklisted / debarred by IMU for at least 3 years, in addition to any other right or remedy available to IMU including forfeiture of EMD, Security Deposit etc.

Date:

Signature with Seal of Authorized Signatory

Place:

OEM'S AUTHORISATION CERTIFICATE TO THE BIDDER

To
The Director,
Indian Maritime University,
P-19, Taratala Road,
Kolkata – 700088.

Ref: Tender No. _____

Sir,

WHEREAS _____ who are official producers / authorized Sales and Service dealers, of _____ do hereby authorize _____

_____ located at _____ (to submit a bid and sign Tender with you for resale and support of the following Products supplied by us, for the quantities, specifications and delivery schedule called for by the technical specifications associated with the above Invitation for Bids:

Product Description	Type

We hereby extend to you a full guarantee and warranty and maintenance support, availability of spares for 5 years from the date of submission of the tender, in accordance with the Conditions of Tender along with the standard product warranty, and duly authorize the Bidder to act on our behalf in fulfilling all warranty and support obligations with respect to the above-listed products offered for resale by the Bidder in relation to this Invitation for Bids.

Name _____ in the capacity of _____

Signed

Duly authorized to sign the authorization for and on behalf of _____

Dated on _____ day of _____

Note: This letter of authorization must be on the letterhead of the supplier, must be signed by a person competent and having the power of attorney to bind the supplier, and must be included by the Bidder in its bid.

BIDDER MEMORANDUM & UNDERTAKING

[to be signed enclosed with technical bid by the bidder.]

1. General Description:
Tender for “Supply of Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications” at Indian Maritime University Kolkata Campus.
IMU/KC/BRV-Mat dated 31.01.2019
2. Period of Contract:
Outright supply with two year warranty and Annual Maintenance Contract for subsequent 3 years.
3. Forfeiture of Earnest Money Deposit & Undertakings by the Bidder
 - a) Should this tender be accepted in whole or in Part, I / we here agree:

to terms and abide and fulfil all conditions annexed hereto and all the terms and provisions contained in the all parts of the tender documents so far as applicable and/or in default thereof the EMD paid by me will be forfeited in favour of IMU KC.
 - b) To execute all the supply and services referred to there in the tender documents upon the terms and conditions contained or referred to therein and carryout such deviations as may be ordered by IMU KC.
 - c) This is to certify that I/We before signing this bid have read and fully understood all the terms and conditions and instructions contained therein and undertake to abide by the all the terms and conditions laid down in the tender/bid documents.
4. I/We abide by all the laws and statutory provisions applicable to the contract.

SIGNATURE.....

FOR AND ON BEHALF OF

DATE.....

Price Bid (Cover II)
FORM OF TENDER

Note: This Memorandum forms part of the Tender must be on the letterhead of the bidder, duly filled in, signed & sealed and enclosed along with the Tender.

To
The Director,
Indian Maritime University,
P-19, Taratala Road,
Kolkata – 700088.

Ref : IMU/KC/BRV-Mat dated 31.01.2019
Sir,

WHEREAS _____ who are official producers / authorized Sales and Service dealers, of _____ do hereby authorize _____ located at _____ to submit a bid and sign Tender with you for sale and support of the following Products supplied by us, for the quantities, specifications and delivery schedule called for by the technical specifications associated with the above Invitation for Bids:

We hereby extend to you a full guarantee and warranty and annual maintenance support, availability of spares for the period covering warranty and annual maintenance contract period from the date of submission of the tender.

SIGNATURE.....

FOR AND ON BEHALF OF

DATE

PRICE BID

“Supply of Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications” at Indian Maritime University designated Campus as per the tender document complying with all the conditions stipulated in various parts of the tender documents including its annexure and schedules.

Detailed Price Bid is enclosed as Schedule 1

Yours faithfully,

Date:

Place:

Signatory

Signature with Seal of Authorized

PRICE BID							
SCHEDULE 1							
Supply of ‘Brinell, Rockwell and Vickers Indenter equipment for Material Testing Laboratory for Research in Industrial Applications’ at Indian Maritime University designated Campus as per the tender document complying with all the conditions stipulated in various parts of the tender documents including its annexure and schedules.							
Ref: IMU/KC/BRV-Mat dated 31.01.2019							
Sl. No	Make & Model	Qty	Rate per unit (in Rs.)	GST rate and amount in Rs.	Sub Total including Unit Rate and GST (in Rs.)	Comprehensive Onsite Maintenance for 3 years immediately after warranty period (Amount in Rs.)	Total Amount (in Rs.)
1	2	3	4	5	6=4+5	7	8=6+7
1							
Total Amount in Figures							
Total Amount in Words							
Name							Signature
Place							

FORM OF BANK GUARANTEE

Bank Guarantee No: _____ Date: _____ Valid up to _____

To
The Director,
Indian Maritime University,
P-19, Taratala Road
Kolkata – 700088.

Sir,

In consideration of Indian Maritime University Kolkata Campus, P-19, Taratala Road , Kolkata – 700088, West Bengal (hereinafter referred to as “IMU KC”) which expression shall mean and include its successors and assignees and having an Order No. _____ dated _____ for _____ (hereinafter called “The Contract”) which expression shall include all the amendments thereto with _____ having its Registered Office at _____ (hereinafter referred to as “The Supplier”), which expression shall unless repugnant to the context or meaning thereof, shall include all its successors, administrators, executors and assignees and IMU KC , having agreed that the Supplier shall furnish the IMU KC, a Bank Guarantee for of _____ (Rupees _____ only) as per the terms of Tender document No _____ dated _____ and Order dated _____.

We, _____ registered under the laws of India having its registered / head office at _____, (hereinafter referred to as the Bank) which expression shall unless repugnant to the context of meaning thereof, include all its successors, administrators, executors and permitted assignees do hereby guarantee and undertake to pay immediately on first demand in writing and any/all monies to the extent of Rs. _____ (Rupees _____ only) without any demur, reservation, contest or protest and/or without any reference to the Supplier. Any such demand made by the IMU KC, on the Bank by serving return notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute pending before any Court, Tribunal, Arbitrators or any other Authority and/or any other matter or things whatsoever, as liability under these presents being absolute and unequivocal. We agree that Guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by IMU KC, in writing. This guarantee shall not be determined, discharged or affected by liquidation, winding up, dissolution or insolvency of the Supplier and shall remain valid, binding and operating against the Bank.

The Bank also agrees that IMU KC, of its option shall be entitled to enforce this Guarantee against the bank as a principal debtor, in the first instance, without proceeding against the Supplier and

notwithstanding any security or other guarantee that IMU KC may have in relation to the Supplier's liabilities.

The Bank, further agrees that IMU KC, shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extent time of performance by the said Supplier from time to time or to postpone for any time or from time to time exercise of any of the powers vested in IMU KC, against the said the Supplier and forebear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Supplier or for any forbearance, act or omission on the part of IMU KC, or any indulgence by IMU KC, to the said Supplier or any such matter or thing whatsoever which under the laws relating to the sureties would, but for this provision have effect of so relieving us.

The Bank further agrees that the guarantee herein contained shall remain in full force until _____ and all dues of IMU KC, under or by virtue of this contract have been fully paid and its claim satisfied or discharged or till IMU KC, discharges the guarantee in writing, whichever is earlier.

This guarantee shall not be discharged by any change in our constitution, in the constitution of IMU KC, of that of the Supplier.

The Bank confirms that this Guarantee has been issued with observance of the appropriate laws of the country of issue.

The Bank also agrees that this Guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Court of the place from where tenders have been invited.

We further agree that as between us and IMU KC, for the purpose of this Guarantee any notice given to us by IMU KC, that the money is payable by the Supplier and any amount claimed in such notice by IMU KC, shall be conclusive and binding on us notwithstanding any difference between IMU KC, and the Supplier or any dispute pending before any Court, Tribunal Arbitrator or any other authority. We further agree that this Guarantee shall not be affected by any change in our constitution or that of Supplier. We also undertake not to revoke this Guarantee during its currency.

Notwithstanding anything contained herein above, our liability under this Guarantee is limited to Rs. _____/- (Rupees _____ only) and Guarantee shall remain in force until _____.

We must receive any claim under this Guarantee before the expiry of this Bank Guarantee. If we have received no such claim by the said date, the rights of IMU KC, under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the IMU KC's right under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorized officer has set its hand and stamp on this _____ Day of _____ 2019 at _____.

Date:

Authorized Signatory of the bank
(with Bank Seal)

Place:

Witness No.1

Witness No.2