

Our Ref: WROL/ 3:28

23 Nov 2009

Subject: Inviting Sealed Tender for the supply of "Tensile Testing Machine".

Sir,

Sealed Tender in Two Bid system is invited by Bureau of Indian Standards for the supply of – one number **"Tensile Testing Machine"** for testing materials like PVC, Elastomer, XLPE cables and Conductors like Aluminium & Copper, in separately sealed covers, which should reach the undersigned latest by **1500h**, on **18 Dec 2009** at the following address: The sealed tender should be dropped in the tender box kept for the same in the office reception area.

**Scientist F & Head
WRO Laboratory,
Bureau of Indian Standards
"Manakalaya"
E-9, M.I.D.C., Behind MIDCTelephone Exchange.
Andheri (East), Mumbai 400 093**

1. Terms and Conditions of supply are given in **Annex-I**.
2. The detailed technical specification of the above mentioned equipment/item(s) is given in **Annex-II**.
3. The Technical Bid & EMD of the tender document shall be opened in the chamber of Sc. F & Head, WRO Laboratory at the address mentioned above at **1530 h on 18 Dec 2009** in the presence of such tenderers or their duly authorized representatives, who may like to attend.
4. Please ensure that the envelopes containing **Technical & Commercial Bids are sealed separately & properly i.e. either wax sealed or with adhesive cello tape on both ends and superscribed " Technical Bid" & " Commercial Bid". Unsealed and stapled envelopes shall not be accepted. Demand Draft / Pay Order of Rs. 20,000/-drawn towards Earnest Money Deposit in favour of " Bureau Of Indian Standards" payable at Mumbai, shall be kept in a separate envelope and marked as EMD.**

The EMD draft shall not be kept inside Commercial Bid envelop. All the three envelopes shall be kept in one common big envelop superscribed with the following information:

“Tender for Tensile Testing Machine”

and address as given above.

5. The technical specification of the equipment and terms & conditions can also be downloaded from our website at – www.bis.org.in/other/tender.asp

6. Bid without EMD shall be summarily rejected.

7. Please note that the Technical Bids of only such bidders will be subjected to evaluation / assessment, who make an explicit statement towards acceptance of our General Terms and Conditions of Supply given in Annex I.

8. Commercial Bids of only such bidders will be opened whose Technical Bid meets the Equipment Specification GIVEN IN aNNEX II, the General Terms & Conditions of Supply given in Annex I and on payment of requisite EMD in favour of BIS.

9. The Bidders whose Technical Bid qualifies for acceptance will be informed about the date of opening of their Commercial Bids and will be permitted to remain present at the time of opening of Commercial Bids, if they so desire.

Thanking you,

Yours faithfully,

(M.D.Chilakwad)
Sc. E & OIC (Purchase)
Ph: 022-28218806

Encl: as above
c.c : BIS Web Site

ANNEX-I

Tensile Testing Machine

(For Testing of PVC, Elastomer and XLPE Cables and Aluminium & Copper Conductors as per IS 694:1990; IS 1554 Pt 1:1988; IS 7098 Pt 1:1988; IS 9968 Pt 1:1988; IS 2465:1984; IS 9857:1990)

TERMS & CONDITIONS

1. The BUREAU gives FIRST PREFERENCE in its purchase to Goods bearing ISI Certification Mark and then preference is given to those Goods which conform to the relevant Indian Standard Specifications.
2. The delivery of the equipment shall made within 60 days of receipt of the order on **door delivery basis**. If it is not possible to effect delivery within the stipulated period, the supplier/manufacturer is required to specify the date by which he can guarantee the delivery of the equipment.
3. The **Technical & Commercial Bids and the EMD draft, with Ref No. & Date indicated on each envelop shall be sealed in separate envelopes**. All the three envelopes shall be kept in one common envelop duly sealed & superscribed with the required information given in the covering letter. The Bids shall remain valid for a period of **120 days** from the date of opening of Technical Bid.
 - 3.1 The **Technical Bid** - shall be accompanied with complete specification, manufacturer's name, address, make & model No. of the equipment quoted, warranty period along with following details:
 - a. Expected life span of the equipment and its accessories.
 - b.. List of infrastructural facilities and consumables to be arranged by the Bureau required for installation & commissioning of the equipment.
 - c. List of at least 5 (five) reputed users like PSUs, Govt Labs in India, with complete postal address, contact person, phone number etc to whom the similar equipment has been supplied
 - d. The supplier/manufacturer should have local service support facility. Details of such locations near Mumbai from where after sales services shall be provided along with the name, address, contact number of uthorised Servicing Agent. The supplier/manufacturer should be able to undertake Annual Mainternace Contract along with required calibration for post waranty support. Warranty Period of the equipment quoted shall not be less than one year.
 - e. The optional and any other essential items/accessories required for maintenance of the equipment for the next three years,
 - f.. Technical literature of the equipment highlighting the salient features including operational, safety features, Dos & DON'Ts along with necessary photographs/ drawings etc
 - g. The **Bureau has presently non working "Instron Make 4202 model TTM" and intends to replace the same under buyback offer on "as is where is basis" and hence the supplier / manufacturer is requested to quote the rates accordingly. Such bidders who are willing to supply machine underbuyback offer will only be considered. The bidder may inspect - the machine at our premises if he so desires.**
 - h. The firm should be ISO 9001 certified.

Note: The period of warranty quoted for the equipment shall in no case be less than one year.

3. Cost of the items should be mentioned only in the **Commercial Bid**. Under no circumstances, cost of the equipment be declared in Technical Bid. It may be noted that the Cost declaration in Technical Bid in any manner is liable to make the Bid invalid. The following details need to be included in the commercial bid:
- Commercial Price break-up of the main equipment, its accessories and consumables to be supplied by the party;
 - Rebate on the quoted price, if additional equipment is procured for any other BIS Lab;
 - The Annual Maintenance Contract charges for next three years after the expiry of warranty period; and
 - Buyback price of the the existing non-functional TTM.
- 3.3 The rates quoted shall be valid for a period of **120 days** from the date of opening of the technical bid of the tender.
4. The tender received in the any one of the following manner are liable for rejection:
- Incomplete Tender as well as Tender/Bids quoted with indefinite expressions such as "Subject to immediate acceptance, Subject to prior sale" etc..
 - Tender not accompanied with Demand Draft of requisite amount towards "Earnest Money Deposit".
 - Tender which is submitted without following the Two-Bid System.
 - Unsigned Tender.
5. The rate quoted should separately indicate Basic Cost, Excise Duty, Sales Tax, P&F charges, VAT etc. In absence of any such stipulation, it will be presumed that the price includes all such charges and no claim for the same shall be entertained at any later date. **Form C/D shall not be provided by BIS.**
6. Each tender document shall be accompanied with an **EMD of Rs. 20,000/-**. The demand draft for the EMD amount shall be drawn in favour of "**BUREAU OF INDIAN STANDARDS**" payable at Mumbai. The sealed envelope containing EMD should be superscribed "**EMD**" and **stapled separately with the envelope containing the Technical Bid.**
7. EMD of the unsuccessful bidders shall be returned to them at the earliest after expiry of the bid validity and latest on or before the 30th day after award of the contract whichever is earlier.
8. After receipt, satisfactory installation & commissioning of the equipment, EMD of the successful bidder shall be either refunded or adjusted against the contract performance security deposit to be retained by BIS.
9. BIS shall pay 90 % of the cost and taxes in full after satisfactory installation & commissioning. The balance 10 % will be retained as Contract Performance Security and would be released after satisfactory expiry of Warranty Period (one year minimum). However, other terms of payment for Contract Performance Security can also be considered, if so stated clearly but the 'Contract Performance Security' shall be valid during arranty period.
10. The **warranty period** of the equipment shall **be stated clearly** in the Technical Bid. In case the same is not found stated, it will be presumed that the **warranty period mentioned by The Bureau in the tender document is applicable.**

11. Please mention clearly in the Technical Bid, the complete address and contact details of **arrangements for service/repair** of the machine. Suppliers having such arrangements near Mumbai would be preferred.
12. The goods received would be subject to acceptance by BIS after successful installation, commissioning and the decision of BIS in this regard shall be final & binding. Rejected items/goods shall be removed by the supplier at his own cost and risk, within 30 days of the receipt of notice for the removal of such goods, and no liability, whatsoever, on the Bureau shall be attached for the rejected/disapproved goods/items.
13. The Bureau reserves the right to accept or reject summarily the tender in whole or part thereof without assigning any reason whatsoever.
14. The Bureau takes no responsibility for delay, loss or non-receipt of tender after despatch.
15. **In case of non compliance with the Terms & Conditions of the contract, the Bureau reserves its right to:**
- a) Cancel/rescind/revoke the order if supply is not made in time and is not conforming to the required specifications.
 - b) Impose Penalty up to 1% of the total value of the order for a delay of every seven days after the schedule date subject to the ceiling of a maximum of 10% of the total value of the order.
16. All questions, disputes or differences arising out of or in connection with this tender enquiry shall be subject to the exclusive jurisdiction of Mumbai Courts.
17. **The authorised signatory of the bidder shall sign with name & designation of the signatory spelt out on each page of the Technical as well as Commercial Bid.**

(M.D.Chilakwad)
Sc. E & OIC (Purchase)

Annexure II

Technical Specification of Tensile Testing Machine

Electromechanically operated Dual column Tensile Testing machine with load & strain controls having 10 kN (1000 Kg) capacity, ball screw driven & computer controlled.

1. **Technical Features** : The Tensile Testing Machine shall be capable of testing materials like PVC, Rubber, XLPE, Elastomer, Polythene, Polypropylene etc, round/flat aluminium wires, strips and copper wires and rubber, yarn as well as other soft materials. Following are the products in which these are used:

- a) PVC insulated & Sheathed cables as per IS 694/IS1554Pt 1/IS 2465 alongwith their cross referred standards
- b) Elastomer Insulated & Sheathed cables as IS 9968 Pt 1
- c) Welding Cables as per IS 9857
- d) Aerial Bunch Cables as per IS 14255

The TTM shall be PC compatible as well as local console operational compatible with USB & RS 232 ports; However PC & Printer of suggested configuration would be provided by BIS. Software required for operation of TTM shall be provided by the supplier/manufacturer.

The manufacturer shall submit alongwith the machine the calibration report from a NABL accredited agency or from an agency having traceability of the calibration report to National Standard like NPL.

1.1 Load Frame & other Hardware

- +/- 10.0 kN Load capacity static rating with resolution (least count) 0.1 N with digital calibration facility
- Ball screw driven for friction free operation (hardened & hard chrome plated load frame with linear bearings for smooth, vibration free movement.)
- servo controlled digital AC drive system operable on single phase 230VAC to achieve continuous variable speed.
- Testing Speed range:
 - a) Min 0.05 mm/min
 - b) Max 500 mm/min
 - c) Return speed :500 mm/min
- Max force at full speed :10kN
- Max speed at full load :500 mm/min
- Vertical test space excluding grips: min 600 mm/including grips 1100 mm
- space between columns : 400 - 450 mm
- displacement measurement resolution 0.01 mm
- speed resolution: +/- 0.01 mm/min with continuous variable speed
- speed accuracy : +/- 0.2 % of set speed
- mechanical over travel limits
- safety provision in pneumatic grips operation.
- facility to add any accessories of improved nature in future without any modifications e.g. additional extensometer, various types of grips etc
- electronic safety limits for protection of sensors like load cells.

Annexure II

Technical Specification of Tensile Testing Machine (contd)

1.2 Controller

- 24 bit data conversion;
- microprocessor based digital controller;
- data resolution of 1/5,00,000;
- display on controller screen for functional parameters;
- self/auto identification & digital auto calibration of all sensor devices like load cells & extensometers;
- measuring accuracy of load & strain +/- 0.5 % of reading values;
- auto stop/auto return at the end of test;
- over load and over travel protection;
- programmable sleep/power down mode to save power when the system is idle;
- capable of printing test results directly from the controller;
- capability of creating test methods for different types of material samples within the controller & saving the same;
- USB/RS 232 interface for Computer software communications, and
- capable of working in stand alone mode also, in absence of P.C. And software.

1.3 Software

- capable of conducting tensile tests;
- Windows XP compatible (Material Testing Software);
- Test method should be in accordance with IS specifications & it shall be possible to create variety of test methods as per customized requirements besides IS Specifications;
- should be capable of accepting variety of sample geometry like rectangular, cylindrical, tube, ring etc with option to enter the cross section area directly for irregular shaped samples, if required;
- user settable test units for force in N, kN, Kg and for elongation in mm, cms etc;
- user settable graph screen to have choice of orientation;
- multiple graph screen;
- customized report option to create user defined report format;
- preloading capability for testing of flexible materials like rubber, plastics, polymers, yarns and fibres;
- extensometer removal option at specified yield point;
- User defined calculations with formula editor to create non standard formulae;
- automatic printing facility of graph & report with statistical analysis & results;
- simultaneous real time graphic display of load, displacement, stress, strain, peak and break value;
- graphical display of load Vs displacement, load Vs time, displacement Vs time, stress Vs time, stress Vs strain.

Annexure II

Technical Specification of Tensile Testing Machine (contd)

1.4 Accessories (standard ones to be provided with machine)

1. Suitable tensile grips for testing materials/samples as stated at 1 of this annexure;
2. Room temp high elongation axial extensometer with span of 800 mm & resolution 0.01 mm with digital calibration provision;
3. complete scope of supply shall be from original manufacturer including machine, its hardware, accessories as well as software for operation.
4. One additional load cell of 1 kN static capacity with resolution of 0.01 N with digital calibration facility.

General:

1. The manufacturer /supplier shall have a local service support facility for prompt after sales service requirement of the customer/user.
2. Should be able to offer Annual Maintenance Contract alongwith required calibration for post warranty support.
3. The firm should be preferably an ISO 9001 certified.
4. Offer to include supply of new TTM under buyback option for our existing Instron Make Model 4202 machine on as is where is condition.

BIS WROL intends to by tensile testing machine for its electrical section. For this tender document – technical bid , general terms and conditions and the covering letter – has been prepared which is attached herewith. Since the last date for receipt of filled tender is 1500hrs on 18 Dec 2009.

Hence , ITS is requested to post this tender document on BIS website on urgent basis

(M.D.Chilakwad)
Sc. E & OIC (Purchase)

Our Ref: WROL/ 3:28

24 Nov 2009

As per attached list.

Subject: Inviting Sealed Tender for the supply of "Tensile Testing Machine".

Sir,

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Thanking you,

Yours faithfully,

(M.D.Chilakwad)
Sc. E & OIC (Purchase)
Ph: 022-28218806

Encl: as above
c.c : BIS Web Site

FOR INVITING SEALED TENDERS FOR SUPPLY OF TENSILE TESTING MACHINE FROM THE
FOLLOWING FIRMS

1. Instron India Pvt Ltd.,
3C, P.M.Tower 37, Greams Road,
Chennai – 600 006
2. M/s Blue Star Limited,
Sahas, 414/2, Veer Savarkar Marg,
Prabhadevi,
Mumbai 400 025.
3. M/s Kamal Metal Industries
Subhash Indl. Estate,
Ramol Road,
Ahmedabad 380 026.
4. M/s Micro Control System --- By hand delivery on 23 Nov 2009.
24/1264/5, Near Hotel Rajas,
Shahapur Road,
Ichalkaranji 416 115.
5. M/s Test Techniques,
2/44, Bhandup Indl. Estate,
L.B.S. Marg,
Bhandup (West)
Mumbai 400 078.
6. M/s Measure India Corporation
T1, 3rd Floor, Venkatdri Enclae,
Street No.6,
Jai Nagar, Habsiguda
Hydrabad 500 007.
7. M/s Dak System Inc.
202 + 203 Samruddhi Com. Complex,
Plot "D", Extn Chincholi Bunder Road,m
Malad (West),
Mumbai 400 064.
8. M/s Scientific Testing (India)
2/5 Phase-II, D.S.I.D.C. Complex,
(Near Police Station), Nand Nagari,
Delhi – 110 093.
9. M/s Ashian Engineers company India
1110, Kirti Shaikhar, Bldg, No.11,
Dist Centre, Janak Puri,
New Delhi 58.
10. M/s Lalit Test Equipment
Unit No.2, Diamand Ind.Estate No.2
Ketkipada Road,
Near Toll Naka,
Dahisar (East), Mumbai 400 068.

