

Ref: CL/PP/BID-02 (09-10)

Date: 23 July 2009

Subject: SUPPLY OF 2 Nos. of CTM [BCM 04(1 No.) & BSM 01(1 No.)] for CL & SROL respectively and 1No. TTM (AEM 05) for EROL.

Dear Sirs,

Technical & Commercial Bids are invited for the supply of **2 Nos. of CTM [BCM 04(1 No.) & BSM 01(1 No.)] for CL & SROL respectively and 1No. TTM (AEM 05) for EROL**, in **separate SEALED** covers, which should reach the undersigned latest by **1500 h, on 17 Aug. 2009**, at the following address:

Director& Head (Planning & Purchase)
BUREAU OF INDIAN STANDARDS
Central Laboratory
Plot No.20/9, Site-IV,
Sahibabad Industrial Area, Sahibabad,
Distt. Ghaziabad-201010 (U.P.)

2. The detailed specification of the above mentioned equipment(s)/item(s) are given in **Annex-I_A, I_B & I_C**
3. Terms and conditions of supply are given in **Annex-II**
4. The technical Bids shall be opened in the **Conference Hall**, of the Central Lab, at the address mentioned above at **1500 h on 18 Aug. 2009** and in the presence of such tenderers or their duly authorized representatives, who may like to attend.
5. Please note that the envelopes containing Technical & Commercial Bids are sealed properly i.e. either wax sealed or with adhesive cello tape on both ends. **Unsigned & Unstamped Bids in Unsealed /stapled envelopes** and bids **without EMD** shall be summarily rejected. **No exemption** whatsoever for payment of EMD shall be accorded. The envelope containing EMD shall be stapled separately with the envelope containing the commercial Bids. The value of EMD should not be disclosed in technical bid.
6. The specification and terms & conditions can also be downloaded from BIS Website – www.bis.org.in.

Thanking you,

Encl.: **as above**

Yours faithfully,

-Sd/-
Director& Head (Planning & Purchase)
Ph. 0120-4177109
0120-2770416

Annex-I_A

EQUIPMENT TECHNICAL SPECIFICATION

Equipment Specification Code:	BCM – 04
Name of the Equipment:	Automatic Compressive Strength Test Machine
Proposal for BIS Labs:	Central Laboratory/Mech
Total Quantity required:	1 No.

Purpose: To determine the compressive strength of cement mortar cubes and Cement concrete cubes

Reference: IS 12269, IS 458, IS 14858 etc

1. Automatic Compressive Strength Test Machine 3000 KN capacity with computer, software, Printer and UPS:

- a. The Automatic Compressive Test Machine should conform to all requirements of IS 14858: 2000.
- b. It shall be fully automated with provision for automatically turning the pump on and off.
- c. Controlling the set pace rate and switching the machine off under predetermined conditions.
- d. It shall be provided with control to release the pressure at the end of every run and reinitialize the machine at the beginning of every test.
- e. Data acquisition, storage management and analysis shall be fully automatic.
- f. Load Resolution. : **0.01 KN or better.**
- g) Accuracy: **± 1.0% of the indicated load or better.**
- h) Suitable for operation on 220V, 50 Hz, single phase AC supply.

2. Special features:

- a. Automatic pace rate control at a preset value.
- b. Multifunctional display.
- c. Menu driven inter face.
- d. Logged data printing facility.
- e. Automatic Data logging.
- f. Auto shutdown facility.
- g. Load-hold facility.
- h. Manual emergency stop button.
- j. Peak load record.
- k. Bar Graph Display for on-line monitoring of the quantity of control.
- m. Automatic control of the pump motor.
- n. Automatic display of breaking load at the end of the test.
- p. Real time clock check to keep automatic track of the date, time and runs.
- q. Calibration checking facility.

- r. Automatic load release facility.
- s. Transmission of data through USB 2.0 connectivity.
- t. Facility to enter the required pace rate, at the beginning of the run.
- u. Set of spacers to suit specimens of different sizes viz 50.0 mm, 70.6 mm, 100 mm, 150 mm, 300 mm cube etc.

3. Dedicated Software features:

- a) An intuitive and easy to use graphical user interface.
- b) Compatible with Microsoft windows operating system.
- c) Facility to list all the runs stored in the digital head.
- d) Facility to download and plot the data for a selected run;.
- e) Facility to save test-data along with other information about the samples such as age. Sample number, batch name, date of test, date of casting, IS No., Name of Testing personnel etc.
- f) Numerical display of the instantaneous value of the load.
- g) A facility for creating users and enabling/disabling their log-in permission.
- h) A sophisticated reporting tool which can be used to generate report for individual samples with data in graphical or tabular form.
 - Load Vs time plot
 - Stress Vs time plot
 - Calibration report
 - Batch summary report.
- j. Least count of 0.01 KN (or better) from 30 KN to 3000KN for all capacities.
- k. All reports to be exportable to MS Word, MS Excel 2007 etc.
- m. Selective deletion of individual and multiple sample records. This feature shall have authorization/password protection.
- n. Help Manual/Tutorial of the Software shall be provided on CD, DVD along with a hard copy.
- p. Shall provide backup of dedicated software and also provision for free update.

3.1 Specification of the computer and other accessories:

- a) Intel Pentium Core 2 duo, 2 GB RAM/250 GB HDD/DVD drive/minimum 4 nos. USB 2.0/Keyboard, mouse, LCD Monitor 17"
- b) MS-Windows XP Professional operating system.
- c) HP PRINTER compatible with the above computer.
- d) UPS of appropriate capacity for operating computer, printer and any other data acquisition devices. UPS shall have back up of at least 15 min and shall be preferably of APC, Microtek, Luminous, Sukam brand

4. Safety Requirements :

- a) It shall not be possible for unauthorized access and alter the data in the computer.
- b) The equipment shall meet the safety standards applicable to ensure the safety of the operation and shall be provided with overload protection.
- c) Safety aspects shall also include constant monitoring and displays of

- i) Front door open/closed status
- ii) Oil level in the tank
- iii) Platen travel limits.

In case any of these safety aspects are faulted, the pump shall automatically stops; the display shall continue to show the error while the alarm buzzer keep on sounding until it is corrected.

5. Special Conditions:

- a) Calibration by NABL Accredited agency shall be part of commissioning by the supplier.
- b) Each of the above specification and pre-installation requirements to be arranged by the user shall be clearly specified in the quotation.
- c) Service/repair back up of the equipment shall be available in and around Delhi.
- d) Entire equipment and related softwares shall have a minimum warranty of 3 years and free upgrade of software shall be for the warranty specified.
- e) Shall provide suitable table for keeping Monitor, CPU, Printer, and UPS etc.
- f) Installation, commissioning and demonstration of complete system and training for two persons at customer site free of charge.

6. Machine Accessories:

- 1) Set of Tool Kit.
- 2) A set of Spare parts(Optional)

Annex-I_B

Specifications for Compression Testing Machine

EQUIPMENT /SPECIFICATION CODE : BSM 01

NAME OF THE EQUIPMENT : CTM (500 KN)

PROPOSED FOR BIS LABS : SROL-Mech. Lab.

TOTAL QUANTITY REQUIRED : ONE No.

Name of the equipment : Computer controlled Automatic Compression Testing Machine (ACTM).

Application : Testing of Cement cubes according to IS 4031:part 7:1988.

Capacity/Range : 0-500KN (L.C: 0.5KN or better)

Specifications

Indicating devices : Load scale indicators / Digital displays.

Accuracy : $\pm 1.0\%$ of the indicated load or better.

Type of operation : Servo controlled & electrically operated.

Rate of loading : 2.9KN/sec (should be controllable)

Speed of moving head : 1.3mm/min

Temperature : The equipment shall be suitable for working in the ambient temperature range of 20-40°C. The temperature coefficient (variation in the accuracy of reading) shall be specified from a reference temperature.

Design requirement

Type of instrument : Totally welded /4 pillar type/2 pillar type / latest available Model (whichever is better with justification)

a) Bottom bearing block

Thickness : Minimum 25mm

b) Auxiliary platens

Hardness value : Minimum 550 HV (As per IS 1501)

Distance between contact faces of the platen : Minimum 23mm

c) Safety requirements

: Test data shall be automatically recorded in the machine recorder and transferred to the computer and saved for future reference (Interface RS 232C, Window based software).

: It shall not be possible to alter the data in the Computer.

: The equipment shall meet the safety standards applicable to ensure the safety of the operator and provided with overload protection

d) Power supply

: 3 Phase,400-440V,50HZ AC

Conditions

: 1)Calibration by NABL Accredited agency shall be part of commissioning by the supplier.

2)Each of the above specification and design requirement shall be clearly replied while quoting.

4 Service/repair back up of the equipment shall be available in and around Chennai.

_____*

_____*

EQUIPMENT /SPECIFICATION CODE : AEM 05 CP

PROPOSED FOR BIS LABS : EROL

Purpose: Primarily to test strength, modulus of elasticity (MOE), modulus of rupture (MOR) of plywood with the provision for tests for other products such as cables, conductors, cotton fabrics, threads, polymers etc.

Computer: Test parameter should be input through computer, output of load, extension, stress, strain, modulus of elasticity, modulus of rupture, graphical representation should be done through computer directly.

I. 0-05 KN, Resolution:0.1 N	Or better
II. 0-10 KN, Resolution:0.1 N	
III. 0-15 KN, Resolution:1.0 N	
IV. 0-20 KN, Resolution:1.0 N	

Accessories: Besides standard accessories, accessories for MOR and MOE and extensometer without duplication supplied with machine.

The machine should be preferably be supplied with Calibration certificate from a NABL accredited laboratory.

* * *

ANNEX-II
BUREAU OF INDIAN STANDARDS
(CENTRAL LABORATORY)
TERMS & CONDITIONS for LTE

1. The Tenderers are requested to give detailed tender in the forms of two bids i.e.
Part - A Technical Bid.
Part - B Financial Bid.
2. The Technical & Financial Bids should be sealed and sent separately in sealed envelopes & duly super-scribed (giving Equipment name, technical/financial bid, due date of opening & Ref. No. on the top of the envelope). Such Bids shall remain valid for a period of 120 days from the date of opening.
3. Bidders may be required to arrange practical demonstration of equipment/model quoted by them before finalization of order.
4. The Technical Bid [Part A] should accompany complete specification, Manufacturer's name, address and following details :
 - a. Expected life span of equipment and accessories.
 - b. List of pre-installation facilities required for installation and commissioning of equipment and also consumables to be arranged by the Bureau,
 - c. List of the Users in India especially Govt. Labs. /Institutes with complete postal address to whom the similar equipment has been supplied,
 - d. Near locations in India from where after sales services shall be provided along with the name of Servicing Agent,
 - e. The optional and any other essential items/accessories required for the maintenance of the equipment for the next three years.
 - f. Technical Literature of the equipment along with necessary clause wise photograph/drawings, if any
 - g. **Compliance statement vis-à-vis specification, including statement of deviation, if any (Annex-III)**
 - h. **Delivery Period:** The delivery of the equipment is required to be made within 90 days of receipt of order. If, it is not possible for you to affect delivery within the period, you are required to specify the date by which you can guarantee delivery of the stores.
 - i. **Warranty:** The equipment is to be guaranteed for trouble free performance for a **minimum period of two years after commissioning.** The defects, if any, during the warranty period are to be rectified free of charge by arranging free replacement wherever necessary.
 - j. The Tenderer is required to furnish the Permanent Account Number (PAN)/TIN of the firm Allotted by the Income Tax Department.
5. Each tender document shall be accompanied with **EMD of 3% of total cost of the equipment (excluding taxes).** The demand draft for the EMD amount shall drawn in favour of BUREAU OF INDIAN STANDARDS payable at Sahibabad/Ghaziabad. The sealed envelope containing EMD should be super scribed **“EMD”** and **stapled separately with the envelope containing the commercial Bids. No disclosure of amount of EMD in Tech. Bid should be done.**

6. Cost of the items should be mentioned clearly in the **Financial Bid [Part-B]** only. The following details need to be included :
- Price break-up of main equipment and accessories and consumables to be supplied by the party,
 - The rates quoted should separately indicate Basic Cost, Excise Duty, Sales Tax, Packing & Forwarding charges, Freight, Insurance, VAT etc. Rates quoted should specifically state Sales Tax, Excise Duty or any other taxes/charges. In absence of any such stipulation, it will be presumed that the prices include all such charges and no claim for the same shall be entertained. **Form C/D shall not be provided by BIS. In case of foreign supplier BIS shall pay Custom Duty.**
 - Rebate on the quoted price, if additional equipment is procured for any other BIS Lab, and
 - The Annual Maintenance Contract charges for next three years after the expiry of warranty period.
 - CIF (Carriage Inward & Freight), Sahibabad, Chennai and Kolkata value both by Airfreight and Ocean freight, where applicable.
7. BIS shall pay **90%** of the cost after satisfactory installation & commissioning and the Balance of **10% as contract performance security** would be paid after expiry of warranty period. **In case of foreign suppliers** 100% payment shall be made by an Irrevocable Letter of Credit established in favour of the supplier through the Canara Bank, DDU Marg, New Delhi, for the order value provided an unconditional Performance Bank Guarantee valid till 60 days after the warranty period from a Nationalized Bank for 10% of the order value within 15 days of placement of the order is given to us. The Agency Commission to the Indian Clearing Agent will not be paid by the Bureau. The firm has to arrange for it. BIS shall provide Custom Duty Exemption Certificate at the time of Custom Clearance as well as any applicable Custom Duty.
8. Place of Delivery:
- For BCM 04: **Director& Head (Mechanical),**
BUREAU OF INDIAN STANDARDS,
Central Laboratory, Plot No.20/9, Site-IV,
Sahibabad Industrial Area, Sahibabad, Distt.- Ghaziabad-201010
- For BSM 01: Head, Southern Regional Office Laboratory,
BUREAU OF INDIAN STANDARDS,
CIT Campus, IV Cross Road, Taramani,
Chennai-600113
- For AEM 05: Head, Eastern Regional Office Laboratory,
BUREAU OF INDIAN STANDARDS, P-230,
CIT Scheme-VII M, Block-W, Kankurgachi,
Kolkata-700 054.
9. Quotations/bids qualified by indefinite expressions such as “Subject to immediate acceptance” etc. and incomplete quotations are liable to be summarily rejected.

10. In case of foreign quotation, the address of Principal's / Manufacturer's and their Banker's details should be furnished. The supplier is required to have an import license for the equipment quoted where applicable as per GOI guidelines.
11. All goods shall be inspected by BIS preferably in the presence of supplier or his authorized representative, when the packages are opened in Labs prior to installation. The decision of BIS shall be binding. Rejected items/goods/stores shall be removed by the supplier at his own cost and risk, within 30 days of 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/stores.
12. INSTALLATION: Bidder shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty and thereafter. If the supplier fails to Supply, Install and Commission the system as per specifications mentioned in the order within the due date, the Supplier is liable to pay Penalty of one percent value of the Purchase Order awarded per seven days or part thereof, delay subject to a maximum of 10% of the total value of the order and such money will be deducted from any money due or which may become due to the supplier.
13. The supply of spare parts is to be guaranteed at least for a period of 10 years after the supply of the equipment.
14. The Bureau reserves the right to accept or reject summarily and/or all tenders in whole or part without assigning any reason whatsoever.
15. The Date and Time of opening for Part B (Financial Bid) will be intimated only to technically acceptable/qualified tenderers at a later date.
16. In case of any dispute arising out of this agreement then DG BIS shall nominate any officer of the BIS a sole arbitrator to adjudicate upon the issue involved in the dispute and the provisions of the Arbitration Act shall be applicable.
17. All question, disputes or differences arising under, out of or in connection with this Bid document shall be subject to the exclusive jurisdiction of Delhi/Ghaziabad Court.

Head (Planning & Purchase)
Bureau of Indian Standards
Central Laboratory

Annex- III

DEVIATION STATEMENT FORM

- 1) The following are the particulars of deviations from the requirements of the tender document and specifications:

SPECIFICATION CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

PLACE:

DATE:

SEAL & SIGNATURE OF BIDDER

NOTE: 1.Where there is no deviation; the statement should be returned duly signed an endorsement indicating **“No Deviations”**.