Our Ref.: CL/DCLE/10:7/BID-03(08-09) Date: 06 05 2009

Subject: PURCHASE OF WATER BATH FOR ADDITIONAL AGEING TEST [CCE 15]

Dear Sirs,

This is to bring to your notice that Technical & Commercial Bids are invited for the supply of – WATER BATH FOR ADDITIONAL AGEING TEST [Hot & Cold], in separate SEALED covers, which should reach the undersigned latest by 1700 h, on 27th May 2009, at the following address:

Director & Head (Electrical) 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(s) of the above mentioned equipment(s)/item(s) are given in **Annex-I (Part I & II)**
- 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 28**th **May 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 & Commercials Bids are sealed properly i.e. either wax sealed or with adhesive cello tape on both ends. **Unsigned Bids**, **Unsealed /stapled envelopes** and bids **without EMD** shall be summarily rejected. **No exemption** whatsoever for payment of EMD shall be accorded.
- 6. The specification and terms & conditions may also be downloaded from BIS Website www.bis.org.in

Thanking you,

Yours faithfully,

Encls: as above

--Sd/--(JA Siddiqui) Scientist- E & Head (Electrical) Ph: 0120 - 4177170

> - 2770537 e-mail- cle@bis.org.in

ANNEX-I PART-I EQUIPMENT SPECIFICATION

Name of the Equipment: Water Bath Additional Ageing Test[Hot]

Proposed for BIS Labs. : Central Laboratory

Quantity Required : One

Type : PID Control Additional Ageing Test Water Bath.

Reference : Cl. 16.6 of IS 694: 1990.

Purpose : To carry out Additional Ageing Test on PVC insulated cable.

Temperature Range : Up to $100 \, ^{\circ}\text{C}$ with accuracy of $\pm 1 \, ^{\circ}\text{C}$

Working Temperature : 90±1 °C [Boiling Water]

Requirements

- 1. Inner size of bath shall be 90cm x 90cm x 90cm.
- 2. Double walled construction.
- 3. Outer body shall be made of mild steel powder coated with resin baking finish.
- 4. Inner chamber & Lid of the instruments shall be made of "Stainless Steel Grade 304" sheet at least 1 mm thickness along with test certificate conforming to IS 6911: 1982 from NABL approved Laboratory.
- 5. All welding in Stainless Steel shall be carried out by using appropriate Stainless Steel electrodes.
- 6. Insulation between the walls is filled with high grade super fine glass wool or Puff to avoid thermal losses.
- 7. Temperature shall be controlled by PID based Digital Temperature Controller cum indicator with an accuracy of ± 1 °C.
- 8. Sufficient number of heating element shall be fitted with for quick attainment of the required temperature. A rigid mesh/frame to cover heating element shall be provided to avoid direct contact with the sample.
- 9. Controlling Panel shall be located at the right side of the instruments with ON/OFF switch / MCB, PID Controller, Heating Indicator, Main Indicator and Preset Time Totallizer with the range 0 to 999.0 hr.
- 10. Shall have circulation pump to maintain uniform temperature of water inside the water bath. The pump shall be capable of working at ambient temperature of 100 °C.
- 11. Water Bath shall be calibrated at five different volumetric points (One centre point and four corners points ie, 10 cm away from the walls and 10 cm deep) at temperatures 70 °C, 85 °C & 90 °C from NABL approved agency.
- 12. Main supply of the instrument shall be Single phase, 220/240 Volt, 50 Hz and suitable supply cord with MCB of adequate current carrying capacity shall be provided with the instruments.
- 13. Instrument shall have provision of 25 mm water inlet with floating valve made of non-ferrous material with stainless steel attachments and 25 mm drainage pipe of stainless steel with suitable gate valve.
- 14. Suitable provision to be provided to minimize the heat loss from the surface of water.
- 15. Shall have proper earthing to bypass the fault current in case of internal short-circuit inside the bath.
- 16. Suitable wheels of insulating material shall be provided to make it movable and isolate it from ground.
- 17. Service of the instrument shall be available in / around Delhi.
- 18. The supplier shall give comprehensive warranty of at least One year from the date of commissioning.

ANNEX-I PART-II

EQUIPMENT SPECIFICATION

Name of the Equipment : Water Bath for Additional Ageing Test [Cold]

Proposed for BIS Labs. : Central Laboratory

Quantity Required : One

Type : Digitally Display Additional Ageing Test Bath.

Reference : Cl. 16.6 of IS 694: 1990.

Purpose : To carry out Additional Ageing Test on PVC insulated cable.

Temperature Range : Up to $100 \, ^{\circ}\text{C}$ with accuracy of $\pm 1 \, ^{\circ}\text{C}$

Working Temperature : 25 °C

Requirements :1. Inner size of bath shall be 90 x 90 x 90 cm.

- 2. Double walled construction.
- 3. Outer body shall be made of mild steel powder coated with resin baking finish.
- 4. Inner chamber & Lid of the instruments shall be made of "Stainless Steel Grade 304" sheet atleast 1 mm thickness along with test certificate conforming to IS 6911: 1982 from NABL approved Laboratory.
- 5. All welding in Stainless Steel shall be carried out by using appropriate Stainless Steel electrodes.
- 6. Insulation between the walls is filled with high grade super fine glass wool or Puff to avoid thermal losses.
- 7. Temperature shall be controlled by PID based Digital Temperature Controller cum indicator with an accuracy of ± 1 °C.
- 8. Suitable heaters and Compressor shall be provided to maintain working temperature i.e. 25 °C from ambient temperature range 10 °C to 50 °C.
- 9. A rigid mesh/frame to cover heating element shall be provided to avoid direct contact from sample.
- 10. Controlling Panel shall be located at the right side of the instruments with ON/OFF switch / MCB, PID Controller, Heating Indicator, Cooling Indicator, Main Indicator and Time Tantalizer with the range 0 to 999.0 hr.
- 11. Shall have circulation pump to maintain uniform temperature of water inside the water bath at working temperature.
- 12. Water Bath shall be calibrated at five different volumetric points (One centre point and four corners points ie, 10 cm away from the walls) at Working temperature from NABL approved agency.
- 13. Main supply of the instrument shall be Single phase, 220 / 240Volt, 50 Hz and suitable supply cord with MCB of adequate current carrying capacity shall be provided with the instruments.
- 14. Instrument shall have provision of 25 mm water inlet with floating valve made of non-ferrous material with stainless steel attachments and 25 mm drainage pipe of stainless steel with suitable gate valve.
- 15. Suitable provision to be provided to minimize the cooling/heating loss from the surface of water.
- 16. Shall have proper earthing to bypass the fault current in case of internal short-circuit inside the bath.
- 17. Suitable wheels of insulating material shall be provided to make it movable and isolate it from ground.
- 18. Service of the instrument shall be available in / around Delhi.
- 19. The supplier shall give comprehensive warranty of at least One year from the date of commissioning.

ANNEX-II TERMS & CONDITIONS

- 1. The BUREAU gives FIRST PREFERENCE in its purchase to goods bearing ISI CERTIFICATION MARK and second preference to those which conform to the relevant Indian Standard Specifications.
- 2. The delivery of the stores is required to be made within 30 days of receipt of order. If, it is not possible for you to effect delivery within the period, you are required to specify the date by which you can guarantee delivery of the stores.
- 3. The **Technical & Commercial Bids should be sealed and sent separately in sealed envelopes**. Such Bids shall remain valid for a period of **90 days** from the date of opening.
- 4. Quotations/Bids, qualified by indefinite expressions as "Subject to immediate acceptance, Subject to prior sale" etc. and incomplete quotations are liable to be summarily rejected.
- 5. The Bids should clearly give break-up of cost of each equipment. The rates quoted should separately indicate Basic Cost, Excise Duty, Sales Tax, P&F 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.
- 6. Each tender document shall be accompanied with **EMD of 3% of cost of the equipment.** The demand draft for the EMD amount shall be drawn in favour of BUREAU OF INDIAN STANDARDS payable at Sahibabad/Ghaziabad. The sealed envelope containing EMD should be superscribed "**EMD**" and **stapled separately with the envelope containing the commercial Bids.**
- 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. However other terms of payment for contract performance security can also be considered, if so stated clearly.
- 8. The warranty period of the equipments shall be at least One year and be stated in the Technical Bids.
- 9. Please mention clearly in the Technical Bids regarding address of **arrangements for service/repair** of the equipments are available. Suppliers having such arrangements near Delhi/Ghaziabad would be preferred.
- 10. All goods received would be subjected to inspection, by BIS before or after receipt or commissioning (as applicable) and 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.
- 11. The Bureau reserves the right to accept or reject summarily and or all tenders in whole or part without assigning any reason whatsoever.
- 12. The Bureau takes no responsibility for delay, loss or non-receipt of tenders after dispatch.
- 13. In case of <u>non compliance with the Terms & Conditions of the contract</u>, 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 specification.
 - 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.
- 14. All questions, disputes or difference arriving under, out of or in connection with this tender enquiry shall be subject to the exclusive jurisdiction of Delhi/Ghaziabad Courts.