

Ref: CL/PP/BID-01 (09-10)

Date: 21 May 2009

Subject: SUPPLY OF XRF Machine for SROL, Chennai

Dear Sirs,

Technical & Commercial Bids are invited for the supply of **XRF Machine for Measuring Purity of Gold & Gold Alloys Jewelry at SROL**, in separate **SEALED** covers, which should reach the undersigned latest by 1700 h, on **15 June 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**
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 16 June 2009** and in the presence of such tenderers or their duly authorized representatives, who may like to attend.
5. Please note that the separate envelopes containing duly signed 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. EMD should be enclosed with financial bid. The value of EMD should not be disclosed in technical bid. Both these sealed envelope (Technical & Commercial Bids) shall be put in a bigger cover which should also be sealed and duly superscribed.
6. The specification and terms & conditions can also be downloaded from BIS Website – www.bis.org.in .

Thanking you,

Yours faithfully,

Encl.: as above

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

ANNEX-I

1.	Name of the Equipment	XRF MACHINE
2.	Application	For measuring purity of Gold and Gold Alloys, Jewellery / artifacts.
3.	Relevant Indian Standard	IS 1417:1999
4.	Specification	
	a. Range	0 to 99.99%
	b. Readability / Accuracy	0.01% or better
	c. Repeatability	±0.01% or better
	d. Sensitivity to temperature	±0.001% per °C or better.
4.1	Design Features: It shall have the following design features: <ul style="list-style-type: none"> i) The X-Ray Tube shall be micro focused to get high intensity. Primary radioactivity shall be controlled by suitable number of primary filters. It shall also have programmable energy saving arrangement. It should have oil cooling arrangement to ensure better life and stability. ii) The detector used shall be Silicon Drift detector with peltier cooling and having atleast 1,00,000 pulses per second. The resolution of the detector shall be less than 160 eV (Mn-Kα). iii) It shall detect all metals from Aluminium to Uranium (Atomic No. 13 to 92) including Platinum group metals such as Ruthenium & Iridium and Cadmium. iv) It shall have the approval for Radiation Safety by the highest National or Internationally approved authority. v) It shall be able to measure the purity at the soldered joints. vi) It shall have the provision to make computerized measurement. vii) It shall have provision to do self calibration to the required accuracy. viii) The Operating Software shall have the following features: <ul style="list-style-type: none"> a) Quantitative analysis of solid, powder or paste materials as well as solutions for upto 24 elements simultaneously. b) In quantitative mode software should be able to measure platinum group of metals along with gold alloy in single measurement. c) Analysis limits from low ppm to 100%. d) Automatic drift compensation during the measurement. e) Automatic identification of elements in qualitative mode. f) Carat composition analysis of gold jewellery under gold coating. g) There should be one software for both qualitative and quantitative analysis. h) Should be able to give warning, if different unknown elements are present during quantitative measurement. ix) The vendor should supply standard reference gold with identification and certificate for calibration of all fineness covered under IS 1417:99 	

4.2	Information / Certificate / Accessories to be supplied	
	<p>i) Full Technical information about:</p> <ul style="list-style-type: none"> a. H.V. Generator and its oil cooled X-ray tube, b. Total number of collimators (should have at least four collimators having measuring spot size covering the range 0.25mm to 4mm with automatic changeovers), their dimension and control. c. Type of Detector and X-Ray Tube. d. Arrangement should be made available to focus on desired spot on the sample without any human error/judgement. e. Video system employed and its resolution and magnification. The video image should be true colour. f. Measuring method and the relevant Standard. <p>ii) The equipment shall be calibrated for Gold Alloy analysis using NIST traceable standards and the calibration certificate supplied.</p> <p>iii) A set of pure calibration elements, tools, cable set and other essential accessories required shall be quoted and supplied along with the equipment.</p> <p>iv) Safety devices & cooling system available in the equipment.</p> <p>v) Input power supply requirement</p> <p>vi) Detail dimension of the equipment.</p> <p>vii) Details of materials used in the construction of the equipment.</p> <p>viii) Ambient / Environmental condition required for installing the equipment.</p> <p>ix) The warranty, after sales service provided, the AMC charges after the warranty period and any other terms and conditions for after sales service.</p> <p>x) Time required for attending any breakdown and local facility available.</p> <p>xi) A one page write-up highlighting the salient features of your equipment and describing how it is better than the other equipment available in the market and is suitable to the Apex Referral Laboratory of India.</p> <p>xii) Details of minimum three reputed Customers of your equipment along with their testimony of performance.</p> <p>xiii) The bidders should have adequate number of installations in India (at least five) of their model conforming to this specification. They should also supply their client list along with the bid.</p> <p>xiv) The bidder shall provide atleast two years on site warranty for the XRF machine.</p>	
5.	Accessories	You shall quote for all the essential and optimal accessories required for the equipment along with the details of their function. (Please also see item 4.1)
6.	Training	You shall train our personnel immediately after commissioning the equipment in operating it and using the software for different applications.
	<p><u>NOTE:</u> The equipment is to be used in the 'Referral Assaying Laboratory' being set up by BIS at their Southern Regional Laboratory, Chennai.</p>	

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

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 superscribed (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. The specification of the XRF machine for measuring purity of Gold and gold Alloys Jewellery/Artifacts have been specified at annexure-I. However 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 (as per 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. Non-adherence to delivery period may invite fore feature of EMD.
 - 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)/TAN 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 :
 - a. Price break-up of main equipment and accessories and consumables to be supplied by the party,
 - b. 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. In case of foreign supplier BIS shall pay Custom Duty (as applicable).**
 - c. Rebate on the quoted price, if additional equipment is procured for any other BIS Lab, and
 - d. The Annual Maintenance Contract charges for next three years after the expiry of warranty period.
 - e. CIF (Carriage Inward & Freight), Chennai 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:** Head, Southern Regional Office Laboratory, BUREAU OF INDIAN STANDARDS, CIT Campus, IV Cross Road, Taramani, Chennai-600113.
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 liquidated damages of one percent value of the Purchase Order awarded, per every week 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 and servicing** 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”.