



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY

NOTICE INVITING TENDER

Phone: +91 431 257 79 38
Fax : +91 431 252 07 19
Email : tvenkat@bheltry.co.in
Web : www.bhel.com

TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two Parts	2621100151	24.09.2011	24.10.2011

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both **delayed offer** and **late offers** will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of **tender opening**.

Item	Description	Delivery Schedule	
		Quantity	Date
10	Cobalt - 60 Gamma Ray Projector with 100 Ci Source and Accessories as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	1.00 No	15.03.2012

Important points to be taken care during submission of offer

1. Material shall be delivered to
Indigenous Vendors:
FOR, BHEL, Stores
Power Plant Piping Unit
Thirumayam
Pudukkottai Dist.
2. Checklist to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
3. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions (refer MM/CE/GT/001) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2621100151".

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

Sr. Manager / Capital Equipment / MM

PART A
QUALIFYING CRITERIA FOR THE SUPPLY OF 100Ci-Cobalt-60 Isotope Camera

S. No.	PARTICULARS	VENDOR's RESPONSE
1.0	Number of Years of Experience of the BIDDER/ VENDOR in the field of design, manufacture and supply of '100Ci Cobalt-60 Isotope Camera'	
2.0	YEAR of LAUNCH of the Model quoted against this ENQUIRY	
3.0	Is there any other model launched after the quoted Model? Otherwise, indicate the likely year in which the next model is likely to be launched	
4.0	Number of 100Ci Cobalt-60 Isotope Cameras supplied, installed and commissioned till date, in the QUOTED MODEL .	
5.0	Number of 100Ci Cobalt-60 Isotope Cameras supplied, installed and commissioned till date for the following category of CUSTOMERS (within INDIA): a) Government Organisations b) Private Sector Companies [Large Scale Industries]	
6.0	Number of 100Ci Cobalt-60 Isotope Cameras supplied, installed & commissioned till date in the following Category (around the GLOBE) : a) Universities b) R&D Labs c) Reputed Heavy Engineering Works/Manufacturing firms	
7.0	Details of Design Set-Up and Technology Back-Up assured for the PRINCIPAL Equipment Maker	
8.0	Details on International Standards followed in Design of the System	
9.0	Comprehensive Details on Performance Testing - of the Equipment quoted, to be ensured in presence of BHEL Executives, prior to dispatch from Supplier's Works	
10.0	Details of Quality System followed (Kindly furnish the salient aspects of the QA system followed)	
11.0	Details on SERVICE-after-SALES Set-Up in India including the addresses of Agents/Service Centres in India and Asia	
12.0	Any Additional Data to supplement the manufacturing capability of the BIDDER	

SECTION – II

The BIDDER / VENDOR has to compulsorily meet the following requirements to get qualified for submitting an offer for the 100Ci Cobalt-60 Isotope Camera.

S. No.	REQUIREMENTS	VENDOR's COMMENTS
13.0	The BIDDER / VENDOR shall have a minimum of TWO Years of Continuous Experience in the Design, Manufacture of 100Ci Cobalt-60 Isotope Camera. Indicate the actual experience.	
14.0	The BIDDER / VENDOR shall have supplied at least one number of 100Ci Cobalt-60 Isotope Camera within the last five years. Indicate the number of equipment (of QUOTED MODEL) sold in India & Other Countries.	

15.0	Reference List of Customers and Performance Certificate from CUSTOMERS (minimum ONE Customers) with full contact details of CONTACT PERSON.	
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SECTION – III

The BIDDER / VENDOR has to comply with the following, for accepting the Technical Offer for scrutiny by the Purchaser :

S.No.	REQUIREMENTS	VENDOR's COMPLIANCE
16.0	The BIDDER / VENDOR shall submit the offer in TWO PARTS - Technical [with PART A & PART B] & Commercial and Price Bid. The Technical Offer shall be in line with the BHEL Technical Specifications and the Guidelines or Annexure mentioned, wherever applicable.	
17.0	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
18.0	The BIDDER / VENDOR shall assure a continuous support for SPARES and SERVICE for FIVE Years, from the date of commissioning of the equipment at BHEL Works.	
19.0	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details of 'Bought-Out-Items' with copies of Product Catalogue and Selection Criteria	
20.0	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation of Scope of Supply.	
21.0	The reference List of Customers shall be accompanied with the details (Phone Number / E-Mail ID) of the CONTACT PERSON for cross reference by BHEL	

AGM/NDT

TECHNICAL SPECIFICATIONS for 100Ci Co-60 source projector with Source.(Exposure device /Camera)

S. No.	PARTICULARS	BHEL SPECIFICATIONS	Bidder's OFFER [With Complete Technical Details]
1.0	Area of Application	For Gamma Radiography of materials and welded structures made of Steel, with thickness ranging from 60mm to 200mm.	
2.0	Principle of Operation	Gamma Ray source projector (Exposure device) is a shielding container with the provision to take out the isotopic source for Radiographic exposure with the help of a Teleflex driving system, and to retrieve the isotope back to the shielding container at the termination of the exposure, for safe storage .The projector shall have the safe locking mechanism and connector selector assembly for safe handling of the isotope.	
3.0	Design Base	Projector should be designed, tested and manufactured to meet the requirements of ANSI N-432-1980, ISO 3999-1 2000E,IAEA TS-R-1 (1996), USNRC 10 CFR34, 10CFR71 and 49CFR173.Additionally the projectors should be designed, manufactured and serviced under a QA program that has been accredited to ISO 9001(2000) and approved in accordance with USNRC 10CFR71,Subpart H and other National standards of the country of origin..	
4.0	Constructional Features	The exposure device body containing depleted Uranium shield, locking mechanism, outlet port, protective covers etc. The device body consists of a titanium “s” tube to house the flexible source pigtail. A control unit comprised of crank and gearbox, a pair of control housing, a Teleflex drive cable and a safety connector assembly. The source guide tube with flexible stainless steel tubes with protective poly vinyl covering and provision to fit with the projector.	
5.0	Specification of the equipment	The details as given below	
5.1	Capacity of the source projector	100 Ci Co-60 Radioisotope. The projectors shall be certified type B (M) package./supplier to specify.	
5.1	Shielding Material	Depleted Uranium	
5.2	Source Conduit in exposure device	‘S’ type	
5.3	Material for conduit	Preferably Titanium/supplier to specify.	

5.4	Material for outer casing	Stainless Steel / Impact resistant plastic	
5.5	Weight of camera	Shall be Less than 300 Kgs	
5.6	Connector assembly and Lock	The control unit connector assembly and the connector safety lock shall be preferably mounted at the backside of the projector.	
5.7	Control unit	Reel type control unit system comprising the basic control unit, a control housing assembly, a Teleflex drive cable and a safety connector assembly. The control housing assembly consists of an outer sheath of flexible metal composite cable with a polyvinyl cover and a Teflon inner lining. The Teleflex driving cable consists of spiral wound flexible steel. The length of the control cable shall be 100 feet to facilitate the source travel of at least up to 50 feet.	
5.9	Source guide tube	Source guide tubes shall be flexible stainless tubes with a protective poly vinyl covering and can be used in 7 Feet lengths up to 35 feet. Intermediate and termination source guide tubes which are interconnectable to provide required length, and the termination tube shall have a permanent fixed source stop.	
5.10	Source assembly(Pig tail) & Source Size.	The source assembly shall consist of a hermetically sealed capsule attached to a leader cable. The opposite end of the leader cable shall have a connector for positive attachment to the source drive cable.	
6.0	Packaging	Projector should meet IAEA and USNRC requirements for type B packaging	
7.0	Type approval	The projector shall have the Type approval from Atomic Energy Regulatory Board, Mumbai	

8.0	Scope of supply.	The scope of supply includes: 1)Co-60 source projector with 100Ci Source and the following accessories. 2) Source Holder (Pigtail)-1No. 3) 50ft /15.0m Reel Type Control with odometer-2no. 4) Control Cable lock and fitting with Key-1No. 5) 7ft /2.1m Source Guide Tube Extension-4 Nos. 6) 7ft /2.1m Source Guide Tube with Fixed Stop-2Nos. 7) Source Positioning Kit-1No. 8) Transport Cart Co-60 source projector-1No. 9) Collimator Tungsten20x360deg.Panoramic-1No. 10) Collimator Lead 60deg.side-1No. 11) Calibrated Digital Survey meters in Si units (Ionization/ counter type only)-2No. Range 0-50R (with steps 0-50mR, 0-500mR,0-1R,0-50R,0-50R) 12) Gamma Zone Monitor (Wall mounted type)-1 No. 13) Dimensional (Source Size) report for Cobalt 60 source. 14) Conformance certificate in accordance with AERB regulations, etc.	
9.0	Consumables for the Source Projector device& Accessories .	BIDDER has to list down the CONSUMABLES, if any to be used in the Operation of the Source Projector system and QUOTE with UNIT RATE for all the listed consumables, to be procured with the system.	
10.0	Spares for Source Projector device& Accessories	BIDDER has to list down the essential Spares required for ensuring normal operation of the system for 2 Years. BIDDER to QUOTE with UNIT RATE for all the listed SPARES, to be procured with the system.	
11.0	Performance Prove-Out at BHEL	The Supplier has to conduct demonstration of the satisfactory performance operation , control and safety aspects of the source projector system with 100Ci Co-60 source and it's accessories, at BHEL.	
12.0	Inspection & Acceptance	The over all system and accessories shall be offered for Inspection by BHEL Engineers at vendors works.. The satisfactory operation & control of the Co-60 Source Projector with 100Ci source, and it's accessories ,shall be demonstrated .	
13.0	Installation and commissioning	The over all source Projector system with 100Ci source and it's accessories, to be installed & commissioned at BHEL Works, FREE OF COST, by the SUPPLIER 's representative.	

14.0	Documentation in ENGLISH Language	3 Copies (In English) of the Operation & Maintenance Manuals shall be supplied, at the time of inspection by BHEL Engineers. In addition, one SOFT COPY in CD to be supplied.	
15.0	Performance Guarantee	The over all Co-60 source Projector system with 100Ci source and it's accessories are to be guaranteed for its performance for a minimum period of one year from the date of performance acceptance at BHEL Works.	
16.0	Service and Spares Support Requirements	Vendor shall ensure after the guarantee period, through trained service personnel in India for next 5 years as and when need arises. Spares to be made available within the shortest time.	
17.0	Training on Operation & Maintenance	Complete Training for BHEL Engineers is to be given on Operation & Maintenance of the OFFERED system.	
18.0	Annual Maintenance Contract – AMC/ Technical support	The BIDDER has to QUOTE for AMC with detailed scope of work.	
19.0	Safety and Quality Standards	Supplier to ensure that Safety and Quality of Over all system shall conform to International Standards. Conformance certificate to be along with the system.	

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