

SECTION - 1**Check-List & confirmations for submission of Tender**

We, M/s _____ hereby confirm the following:

| Sl. | Description | Bidder's response |
|-----|---|---|
| 1. | <p>We have submitted our offer in 2-parts viz.,</p> <p>Technical-cum-Commercial Bid (Part-A) comprising of:</p> <p>(a) DD no. _____ dated _____ for Rs. _____ drawn on _____ _____ towards tender cost</p> <p>(b) Section 1 (This check list & confirmations)</p> <p>(c) Section - 2 (Qualifying Criteria with all attachments)</p> <p>(d) Section - 3 (Technical Specifications)</p> <p>(e) Section - 4 (Filled-up "Key Commercial Aspects")</p> <p>(f) Unpriced copy of Price Bid</p> <p style="text-align: center;">and</p> <p>Price Bid (Part B)</p> | <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> |
| 2. | The Technical offer has been supported by Product Catalogues and descriptions | YES / NO |
| 3. | We assure continuous support for the supply of SPARES and SERVICES for 7 years from the date of commissioning of equipment at BHEL Works. | YES / NO |
| 4. | We deal in manufacturing & supply of similar machines and we had supplied similar type of machines to our various Customers and the list is attached herewith. | YES / NO |
| 5. | We have sealed both the parts of our Offer i.e., Part - A & Part - B in separate sealed envelopes and both these parts have then have been sealed in a third envelope. All these 3 envelopes have been properly superscribed with Tender No., Due date of opening etc. | YES / NO |
| 6. | We agree that BHEL has all the rights to accept / reject any or all Tenders or part thereof without assigning any reasons thereto. BHEL's decision shall be final & binding upon us. | YES / NO |
| 7. | We also agree that BHEL has the right to visit our Works before clearing our offer technically-cum-commercially and based on the observations during such visit BHEL may technically reject our offer | YES / NO |
| 8. | We agree that BHEL has the right to go for Reverse Auction w/out opening the physical price bids and we agree to participate in the Reverse Auction process, if BHEL so decides. | YES / NO |

Signature & Seal of Bidder

SECTION 2**Techno Commercial Bid**

Sub: Qualifying criteria for supply of: X ray equipment, capacity - (200-235)KV, 5MA

The BIDDER has to compulsarily meet the following requirements to get technically qualified in this Tender. The "Vendor's Response" column has to be necessarily filled-in by the BIDDER in this prescribed format, as following:

| SL.NO. | QUALIFYING REQUIREMENT | VENDOR's RESPONSE |
|--------|--|--|
| 1.0 | <p>1.1 Only those Bidders, who have supplied and commissioned at least ONE machine of similar rated capacity or more in the past 5 years and such machine is presently working satisfactorily for more than one year after commissioning (on the date of opening of this Tender) shall only qualify</p> <p style="text-align: center;">OR</p> <p>1.2 If such machine has been supplied to BHEL, then it should be presently working satisfactorily for more than 6 months after its commissioning and acceptance (on the date of opening of this Tender) in BHEL shall only qualify</p> <p>NOTE: Performance certificate from the Customers (minimum 2) regarding satisfactory performance should be sent alongwith Technical Offer</p> | <p style="text-align: center;">AGREED</p> <p>PO No.: _____</p> <p>PO Date: _____</p> <p>Customer: _____</p> <p>M/c description: _____</p> <p>Commissioning date: _____</p> <p>User Deptt.: _____</p> <p>Contact Person: _____</p> <p>Designation: _____</p> <p>Contact No.: _____</p> <p>Encl: _____ nos. Annexures</p> <p>PO No.: _____</p> <p>PO Date: _____</p> <p>Customer: _____</p> <p>M/c description: _____</p> <p>Commissioning date: _____</p> <p>User Deptt.: _____</p> <p>Contact Person: _____</p> <p>Designation: _____</p> <p>Contact No.: _____</p> <p>Encl: _____ nos. Annexures</p> |
| 2.0 | <p>BHEL reserves the right to verify the information provided by the BIDDER. In case the information provided by the BIDDER is found to be false / incorrect, the offer shall be REJECTED</p> | |
| 3.0 | <p>In case, the bid is submitted by authorized agents / distributors, appropriate authorization certificate from Principals to be attached.</p> | |

Signature & Seal of Tenderer



Bharat Heavy Electricals Limited,

Part A (Techno-Commercial Bid)

Section 3

Specification cum Compliance Certificate for X-Ray Equipment

Note:-

1. The 'Offered' Column and where applicable, the 'Deviations' & 'Remarks' Column of this format shall be filled in by the Vendor and submitted along with the

2. The offer and all documents enclosed with offer should be in English language only.

Name & Address of the supplier:

Name & Address of the Indian Agent:

Telephone No.

Telephone No.

Fax No.

Fax No.

e-mail :

e-mail :

Scope: Supply, Erection & Commissioning of X-Ray Equipment complying with the following specification

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Description - BHEL's Requirement

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S No.

S No.

1.0 **PURPOSE & WORK PIECE MATERIAL**

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Purpose:

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X ray of Aluminium Alloy plate (3.15-30)mm thickness

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1.2 Work Piece Material:

1.2 Work Piece Material:

SPECIFICATION

SPECIFICATION

MACHINE CONFIGURATION: X-Ray Equipment, (200-235) kV, 5mA

MACHINE CONFIGURATION: X-Ray Equipment, (200-235) kV, 5mA



Bharat Heavy Electricals Limited,

| | |
|------------------|--|
| Enquiry No. : | |
| Due Date : | |
| Supplier's Ref.: | |
| Date : | |

Part A (Techno-Commercial Bid)

Section IV

Specification cum Compliance Certificate for X-Ray Equipment

Note:-

1. The 'Offered' Column and where applicable, the 'Deviations' & 'Remarks' Column of this format shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous or unsustainable information against any of the clauses of the specifications / requirements shall be treated as non-compliance.

2. The offer and all documents enclosed with offer should be in English language only.

| | |
|---------------------------------|-------------------------------------|
| Name & Address of the supplier: | Name & Address of the Indian Agent: |
| Telephone No. | Telephone No. |
| Fax No. | Fax No. |
| e-mail : | e-mail : |

Scope: Supply, Erection & Commissioning of X-Ray Equipment complying with the following specification

| S No. | Description - BHEL's Requirement | Specified | Offered | Deviations |
|------------|---|------------------------|---------|------------|
| 1.0 | PURPOSE & WORK PIECE MATERIAL | | | |
| 1.1 | Purpose: Non Destructive Test(NDT) | X-Ray Test | | |
| 1.2 | Work Piece Material: | Welded Aluminium Alloy | | |
| 2.0 | SPECIFICATION | | | |
| | MACHINE CONFIGURATION: Directional, Suitably Insulated, Portable X-Ray Generator, with Telescopic centring rod, Radio remote control unit & Power Control Unit. | Vendor to confirm | | |
| 2.1 | CAPACITY & SIZE | | | |
| 2.1.1 | Thickness of welded aluminium alloy work piece (mm) | 3.15-30 | | |
| 2.1.2 | Capacity (Suitable for above job) | (200-235) kV, 5mA | | |
| 2.2 | CONSTRUCTION: | | | |
| 2.2.1 | Vendor to Confirm the constructional details, including explanatory drawings, of various accessories | Vendor to Confirm | | |
| 2.2.2 | Video images on CD including hard copy explaining the technical features / Literature with photographs, drawings explaining the technical features should be enclosed with the offer. | Vendor to Confirm | | |
| 2.2.3 | Power Supply cable with one plug min 10 mtr | Vendor to Confirm | | |
| 2.2.4 | Interconnection cable ,Min 25mtr with two plugs | Vendor to Confirm | | |
| 2.2.5 | Portable Trolley suitable for X-Ray Generator | Vendor to Confirm | | |
| 2.2.6 | The working principle of the above mechanism shall be explained clearly. | Vendor to explain | | |
| 3.0 | OPERATION AND CONTROL SYSTEM: | | | |
| 3.1 | CONTROL PANEL: | | | |
| 3.1.1 | Wireless remote/power control unit | Vendor to confirm | | |
| 4.0 | ELECTRICAL : | | | |
| 4.1 | 415V + 10% / -10%, 50HZ ± 3 HZ, 3 /1 Phase AC Power Supply Voltage will be provided by BHEL at a single point near the machine. | Vendor to confirm | | |
| 5.0 | Tropicalisation: All electrical / electronic equipment shall be tropicalized(operating temperature 0 °C to 50°C) | Vendor to confirm | | |
| 5.1 | All electrical & electronic control cabinets & panels should be dust and vermin proof | Vendor to confirm | | |
| 5.2 | All cables and cable trays required for the machine should be included in the offer. | Vendor to confirm | | |
| 5.3 | Vendor should ensure the proper earthing for the machine and its peripherals. | Vendor to confirm | | |
| 5.4 | The electrical components used shall be from reputed international makes such as Siemens / Telemecanique / Merlin Gerin / GE/ ABB and shall be accordance with DIN/IEC Standards. | Vendor to confirm | | |
| | SAFETY ARRANGEMENTS: | | | |
| | Following safety features in addition to other standard safety features should be provided on the machine: | | | |

| S No. | Description - BHEL's Requirement | Specified | Offered | Deviations |
|--|--|---------------------------|---------|------------|
| 6.0 | 1. Machine should have adequate and reliable safety interlocks / devices to avoid damage to the machine, work piece and the operator due to the malfunctioning or mistakes. Details shall be submitted in the technical bid. 2. Detailed list of safety alarms / indications provided on the machine shall be submitted along with the offer. | Vendor to furnish details | | |
| ENVIRONMENTAL PERFORMANCE OF THE MACHINE : | | | | |
| 7.0 | If any safety / environmental protection enclosure is required it should be built in the machine by the vendor. | Vendor to confirm | | |
| TOOLS FOR ERECTION, OPERATION & MAINTENANCE : | | | | |
| 8.0 | Special tools and equipment required for erection of the machine shall be brought by the vendor. Necessary tools. | Vendor and agree | | |
| 8.1 | SPARES: Item wised breakup of (1) standard-mechanical, hydraulic, electrical and electronic accessories & spares (included in Basic machine cost), (2) Essential -spares/accessories required for the Purpose and (3) Optional in sufficient quantity as per recommendation of Vendor for 5 years (After initial 24 month's Guarantee period) of trouble free operation on three shifts continuous running basis should be offered by vendor. If machine or control is likely to become obsolete in this period, the vendor should inform BHEL sufficiently in advance and provide drawings of parts / details of spares & suppliers to enable BHEL to procure these in advance, if required The list to include following, in addition to other recommended spares: (Unit Price of each item of spare should be offered in the price bid) | Vendor to agree | | |
| 10 | DOCUMENTATION : Three sets of following documents (Hard copies) in English language should be supplied along with the machine. Only originals shall be supplied. Photocopies will not be accepted. | Vendor to confirm | | |
| 10.1 | Operating manuals of Machine | Vendor to confirm | | |
| 10.2 | Programming Manuals of Machine | | | |
| 10.3 | Detailed Maintenance manual of machine with all drawings of machine assemblies/sub-assemblies/parts including Electrical circuit diagrams. All Assembly/ Sub Assembly Drawings. | | | |
| 10.4 | Catalogues, O&M Manuals of all bought out items including drawings, wherever applicable. | | | |
| 10.5 | Complete Master List of parts used in the machine shall be submitted by the vendor. | | | |
| 10.6 | One additional set of all the above documentation on CD ROM, wherever possible. | | | |
| 11.0 TRAINING | | | | |
| 11.1 | BHEL Persons should be trained at supplier's Works for mutually agreed period in the area of (a) Electrical, Electronic maintenance for machine & other supplied equipments (c) Operation of the machine & other supplied equipments. | Vendor to confirm | | |
| 11.2 | Fare, boarding & lodging for the trainees shall be borne by BHEL. | Vendor to confirm | | |
| 11.3 | Competent experts shall be arranged by the vendor during training for satisfactory & effective training of BHEL personnel. | Vendor to confirm | | |
| 11.4 | Vendor to quote for training on <i>per diem</i> basis | Vendor to confirm | | |
| 12.0 ERECTION & COMMISSIONING | | | | |
| 12.1 | Supplier to take full responsibility for carrying out the erection, start up, testing of machine, it's control & all types of other supplied equipment, machining of test pieces etc. Service requirement like power, air & water shall be provided by BHEL. Other requirements like helping personnel shall also be provided by BHEL. Details of these requirements should be informed by vendor in advance. | Vendor to aree | | |
| 12.2 | Successful working of full capacity of the machine by the supplier shall be considered as part of commissioning. All tests, as mentioned at clause 13 & 14 shall form part of the commissioning activity. | Vendor to aree | | |

| S No. | Description - BHEL's Requirement | Specified | Offered | Deviations |
|--------|--|--|---------|------------|
| 12.3 | Tools, Tackles, instruments and other necessary equipments required to carry out all above activities should be brought by the supplier. | Vendor to aree | | |
| 12.4 | Commissioning spares, required for commissioning of the machine within stipulated time, shall be brought by the supplier on returnable basis. | Vendor to aree | | |
| 12.5 | Portion, if any, of the machine, accessories and other supplied items where paint has rubbed off or peeled during transit or erection should be repainted and merged with the original surrounding paint by the vendor. For this purpose, the vendor should supply sufficient quantity of touch-up paint of various colours of paint used. | Vendor to aree | | |
| 12.6 | Schedule of Erection and Commissioning shall be submitted with the offer. | Vendor to aree | | |
| 12.7 | Charges if any, duration, terms & conditions for E&C should be furnished in detail separately by vendor along with offer. | Vendor to Confirm | | |
| 13.0 | TESTING STANDARD & PROCEDURE | Vendor to confirm | | |
| 13.1 | Repeatability of setting | | | |
| 14.0 | MACHINE ACCEPTANCE: (Tests/Activities should be Performed by Vendor) | Should be accepted & confirmed by Vendor | | |
| 14.1 | Tests/Activities should be carried out at supplier's works on the machine before dispatch : | | | |
| 14.1.1 | The machine should be tested for full load test at supplier works before despatch. | Vendor to confirm | | |
| 14.1.2 | Demonstration of all features of the machine, control system & accessories. | | | |
| 14.2 | Tests/Activities should be carried out at BHEL works while commissioning the machine : | | | |
| 14.2.1 | Demonstration of all features of the machine, control system & accessories to the satisfaction of BHEL for efficient and effective use of the machine. | Vendor to confirm | | |
| 14.2.2 | Training of BHEL machine operators in operation of complete machine & accessories etc by the supplier's experts / engineers during their stay at BHEL works. | Vendor to confirm | | |
| 14.2.3 | Demonstration by actual use of all supplied attachments and accessories to their full capacity for actual jobs. | Vendor to confirm | | |
| 15.0 | PACKING: | | | |
| 15.1 | Rigid packing for all items of complete machine with all Accessories and other supplied items to avoid any damage/loss in transit. When machine is despatched in containers, all small loose items shall be suitably packed in boxes. | Vendor to confirm | | |
| 16.1 | GUARANTEE : | | | |
| 16.2 | Guarantee for 24 months from the date of acceptance of the machine at BHEL works . During this Guarantee period at least 2 visits per year and/or whenever called by BHEL (within 24 hours of call) by the service engineer of the supplier to be made & the parts, items, spares etc. needing replacement to be replaced by the supplier free of cost. In support a Performance Bank Guarantee of 10% of Basic Value of P.O. valid for 24 months from the date of commissioning will have to be furnished by supplier | Vendor to confirm | | |
| 17.0 | GENERAL : | Vendor to confirm | | |
| 17.1 | Machine Model | Vendor to confirm | | |
| 17.2 | Total connected load (KVA): | Vendor to confirm | | |
| 17.3 | Total weight of the machine | | | |
| 17.4 | Detailed catalogues, sketch/photographs of the m/c and accessories/ attachments should be submitted with the offer. | Vendor to Submitted | | |

Signature & Seal of Tenderor