



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirapalli – 620014, TAMIL NADU, INDIA

MATERIALS MANAGEMENT / CAPITAL EQUIPMENT

ENQUIRY NOTICE INVITING TENDER	Phone: +91 431 257 7653 Fax : +91 431 252 0719 Email : skaruna@bheltry.co.in Web : www.bhel.com
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TWO PART BID Tender to be submitted in Two Parts	Enquiry Number: 2731200006	Enquiry Date: dt.24.10.2012	Due date for submission of quotation dt.23.11.2012
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You are requested to quote the Enquiry number date and due date in all your correspondences. 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 No.	Item Description	Quantity
10	Supply and commissioning of Tilting Turn Table (500 Kg Capacity) as per the Technical Specification, & Commercial Conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	03 Nos.

Important Points to be taken care during the submission of offer:-

1. Bidder's Response Column in technical specification sheet to be duly filled in without fail. Additional details provided in the offer may be supported with documentary evidence.
2. Check list to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.

BHEL's General guidelines /instructions including bank guarantee formats and list of consortium banks, commercial terms checklist 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) Tender Enquiry reference "2731200006"

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 Engineer / MM / Capital Equipment
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Part A: COE :TI:ATP:

PART A**QUALIFYING CRITERIA FOR THE SUPPLY OF “Tilting Turn-Table” – Qty 3 Nos.****SECTION – I**

The BIDDER is expected to give complete details against each clause in the table given below, with additional sheets those may be attached (giving clear reference number) to furnish and cover the requisite details / documents.

S. No.	PARTICULARS	BIDDER'S RESPONSE
1	BIDDER to provide the Profile of their Company	
2	The Bidder (OEM) shall have a minimum of TEN Years of Continuous Experience in the field of Design, Manufacture and Supply of Tilting Turn-Table machines.	
3	List of customers to whom Tilting Turn-Table machines were supplied, installed and commissioned till date.	
4	Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of Agents / Service Centres in India.	
5	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.	

Part A: COE :TI:ATP:

SECTION – II

The BIDDER has to compulsorily meet the following requirements to get qualified for submitting an offer for the Tilting Turn-Table:

S. No.	REQUIREMENTS	BIDDER'S RESPONSE
1	Only those Bidders (OEMs) should quote, who have supplied and commissioned at least Five Tilting Turn-Table, of capacity 500 Kgs or higher, in the past three years (on the date of opening of Tender) and such machine should presently be working satisfactorily for more than one year after commissioning (on the date of opening of Tender),.	
	The Bidder should submit following information where the tilting turn-tables have been supplied:	
1.1	Name and postal address of the customer or company where similar equipment is installed.	
1.2	Name and designation of the contact person of the customer.	
1.3	Phone, FAX no and email address of the contact person of the customer.	
1.4	Month and Year of commissioning of the equipment.	
1.5	Application for which the equipment is supplied	
2	Along with the Technical offer, the Bidder should submit the <u>Performance certificates from the customers for the satisfactory performance of the equipment supplied as per clause 1.0 above.</u> (For obtaining the Performance certificate, a suggestive format is provided in SECTION – IV)	
3	Offers of only those Bidders who meet the above Qualifying Criteria will be considered for further evaluation.	
4	BHEL reserves the right to verify the information provided by Bidder. In case the information provided by Bidder is found to be false/ incorrect, the offer shall be rejected.	

Part A: COE :TI:ATP:

SECTION – III

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

S. No.	REQUIREMENTS	BIDDER's COMPLIANCE
1	The BIDDER shall submit the offer in TWO PARTS-Technical [with PART A & PART B] & Commercial and Price Bid.	
2	The offer shall contain a comparative statement of Technical Specifications given by BHEL and the offered details submitted by the Bidder, against each clause. Merely stating 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words wherever 'Bidder to Specify' details in the technical comparative statement may lead to disqualification of the Technical Offer.	
3	The Technical Offer shall be supported by product Catalogues & Data Sheets and also technical details of Bought-Out-Items with copies of Product Catalogue to the extent possible.	
4	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 the inclusion of all the accessories, tooling's, attachments, auxiliary parts, spares, consumables, etc. with the main and basic equipment, to meet the technical specification requirements.	
5	BIDDER has to indicate the Country of Origin for the supply of equipment.	

Part A: COE :TI:ATP:

SECTION – IV

PERFORMANCE CERTIFICATE
(On Customer's Letter Head)

1. Supplier of the Tilting Turn-table :

2. Make & Model of the Tilting Turn-table :

3. Month & Year of Commissioning :

4. Application for which the Tilting Turn-table is used :

5. Size of the rotary table & weight carrying capacity of the table :

6. Performance of the equipment : Satisfactory / Good / Average /
(Strike off whichever is not applicable) Not Satisfactory

7. After Sales Service : Satisfactory / Good / Average /
Not Satisfactory

8. Any other remarks :

Date:

Signature & Seal of the Authority
issuing the Performance Certificate

TECHNICAL SPECIFICATION
TILTING TURN TABLE – 500 KG CAPACITY – Qty : 3 Nos.

PART – B

Clause	PARTICULARS AND BHEL SPECIFICATION	BIDDERS OFFER With Technical Details
1.0	Purpose – The turn tables are intended for holding of jobs for welding.	
1.1	JOB PROFILE: a) Circular Jobs : Dia. 50 mm to 600 mm Thickness / Height 600 mm (max) b) Others: 300 mm x 300 mm (max) Thickness 100 mm (max) c) Maximum weight of job: 500 Kg.	
2.0	Tilting Type Turn Table:	
2.1	Turntable shall be useful for clamping jobs. It shall have rotation (B axis) and tilting (C-axis) arrangement.	Vendor to confirm
2.2	Construction: Framework and table should be of rigid steel construction and minimum thickness of any component of the table /frame shall not be less than 12 mm thickness. There should not be any vibration and noise level should be less than 85dB with in a distance of 1M.	
2.3	Display of “Angle of tilt” and “Speed of rotation”	Vendor to specify
2.4	Weight carrying capacity: 500 kg. - when the table is at vertical (perpendicular to the ground) position.	Vendor to confirm
2.5	Dia. of table: Around 800 mm with minimum 4 radial T-slots. Vendor to specify size of table and Size & Number of T slots	Vendor to specify
2.6	Central Hole: Dia. 30 mm (max)	Vendor to specify
2.7	Height of table surface from floor level: Approximately 1000 mm – when the table is in horizontal position.	Vendor to specify

Clause	PARTICULARS AND BHEL SPECIFICATION	BIDDERS OFFER With Technical Details	
2.8	Rotation Speed – Step less variable speed 0.1 rpm to 5 rpm. Rotation should be uniform (variation within 0.1 percent) and also without any jerk / interruption.	Vendor to confirm	
2.9	Tilting angle shall be varying from 0 to 90°. An angular scale graduated with an LC of 0.5 degrees shall be fitted to indicate the angle of tilt.	Vendor to confirm	
2.10	Tilting shall be by manual operation, table positioning at any angle between 0 to 90° and locking at that position shall be possible.	Vendor to confirm.	
2.11	Tilting torque of the table :	Vendor to specify	
2.12	Standard slewing ring is to be provided and to be protected from damage due to welding current by providing suitable earthing arrangement. The bearings of table and Slewing rings shall be of reputed makes of SKF/ FAG/ TIMKEN or any other reputed make which are acceptable to BHEL.	Vendor to confirm	
2.13	Positional stability: The Turn table should be stable at any tilted position of the table with the Job mounted condition.	Vendor to confirm	
3.0	ELECTRICAL:		
3.1	415V ± 10%, 50HZ ± 3 HZ, 3 Phase AC (3 wire system without neutral) Power Supply will be provided by BHEL at a single point near the table, as per layout recommended by Vendor. All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the table/control boxes, shall be the supplied by the vendor.	Vendor to confirm	
3.2	Motors shall conform to IEC or Indian Standards. Preferred makes of motors are SIEMENS/ABB. Any other makes suggested by the vendor is subject to the acceptance by BHEL.	Vendor to confirm	
3.3	The KW rating of the motors to be specified	Vendor to specify	
3.4	All pneumatics, if any shall be of Festo make and hydraulics, if any shall be of Rexroth / Vickers make.	Vendor to confirm	
3.5	The drives shall be of SIEMENS/ABB or any other make acceptable to BHEL	Vendor to confirm	

Clause	PARTICULARS AND BHEL SPECIFICATION		BIDDERS OFFER With Technical Details
3.6	BHEL prefers to have standard reputed gear boxes used in the machine. Gear boxes shall be of Radicon / greaves / Bonfiglioli or any other reputed make is subject to the acceptance by BHEL.	Vendor to confirm	
3.7	All the cable trays required for laying of cables should be included in the offer.	Vendor to confirm	
3.8	Wiring: All electrical motors, limit switches etc, on the machine shall be wired using PVC sheathed cable running in conduits to common terminal block. All cables, wires shall be neatly routed and fixed with proper identification.	Vendor to confirm	
4.0	Spares: Itemized break-up of Mechanical, Electrical , Electronic and Pneumatic /Hydraulic Spares used on the machine in sufficient quantity as per recommendation of BIDDER for 2 years of trouble free operation on three shifts continuous running basis should be offered by BIDDER.	Vendor to furnish	
4.1	Mechanical & Hydraulic Spares: Bearings, Clutches, gears and all types of Pumps, Valves, Pressure Switches / Transducers, Filters, Seals, 'O' Rings, Hydraulic Hoses, etc.	Vendor to furnish	
4.2	Electrical Spares: All types of Drives, Relays, Contactors, Proximity Switches, Printed Circuit Boards, Push Buttons, Indicating Lamps, Semiconductor Fuses, Special Fuses, Circuit Breakers, Main Power Switch, etc.	Vendor to furnish	
4.3	All types of spares for the total machine and accessories shall be available for at least ten years after supply of the machine. 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 & Vendors to enable BHEL to procure these in advance, if required.	Vendor to confirm	
4.4	Vendor to confirm that complete list of spares for machine and accessories, along with specification / type / model, and name & address of the spare Vendor shall be furnished along with documentation to be supplied with the machine.	Vendor to furnish	

Clause	PARTICULARS AND BHEL SPECIFICATION		BIDDERS OFFER With Technical Details
5.0	DOCUMENTATION:		
5.1	The following documents shall be furnished along with the offer : a. GA drawing of the offered turn table with dimensions b. Turn table rotation, tilting & clamping mechanism. c. Makes of the bought-outs d. Construction features	Vendor to furnish	
5.2	After placement of order the vendor shall submit the GA drawing with major dimensions with BOM and Electrical circuit with BOM for BHEL approval.	Vendor to confirm	
5.3	3 sets of the following documents shall be furnished during inspection and supply : a. GA drawing with BOM b. Turn table rotation, tilting & clamping mechanism. c. The operator instruction manual d. Electrical Circuit with BOM e. Maintenance instruction manual f. Guarantee / warranty cards of all bought-outs	Vendor to confirm	
5.4	Sub-assembly / Arrangement drawings with bill of materials and critical dimensions for the following: b) Table rotation / clamping arrangement. c) Table rotation drive arrangement. d) Table Tilting drive arrangement.	Vendor to confirm	
6.0	ACCEPTANCE:		
6.1	Acceptance at vendor's works - The turn table shall be offered for inspection by BHEL at vendor's works prior to dispatch. All features of the turn table (weight carrying capacity, rotation speeds, tilting with load etc..) shall be demonstrated.	Vendor to confirm	
6.2	Acceptance at BHEL - During commissioning the vendor should demonstrate all features of the turn-table as listed in 6.1	Vendor to confirm	

Clause	PARTICULARS AND BHEL SPECIFICATION	BIDDERS OFFER With Technical Details	
7.0	Installation and commissioning at BHEL – Installation and commissioning of the turn tables at BHEL shall be in the scope of vendor	Vendor to confirm	
8.0	Painting : All non-working surfaces and control panels shall be given a primer coat & two coats of paint with SYNTHETIC ENAMEL GLOSSY FINISH APPLE GREEN PAINT AS PER IS 5/1994. Shade : (ISC)NO-281 . All unpainted surfaces shall be protected from rust during transit.		
9.0	PACKING – The turn tables shall be packed rigidly to avoid any transit damage and dispatched	Vendor to confirm	
10.0	GUARANTEE: 12 months from acceptance of the turn tables at BHEL or 18 months from dispatch whichever is earlier.	Vendor to confirm	
11.0	GENERAL		
11.1	Turn table Model:	Vendor to specify	
11.2	Total connected load (KVA):	Vendor to specify	
11.3	Floor area required (Length, Width, Height) for complete turn table:	Vendor to specify	
11.4	Painting of turn table / Electrical Panels :	Vendor to confirm	
11.5	Total weight of the turn table	Vendor to specify	