



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

TIRUCHIRAPPALLI – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT/ MATERIALS MANAGEMENT

ENQUIRY		Phone: +91 431 257 7421/7775	
NOTICE INVITING TENDER		Fax :431 257 6826	
		Email : vkarna@bhel.in , kumar.virendra@bhel.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	2741900019	20.11.2019	13.12.2019
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	Description		Qty.
10	"Procurement of Magnetic Particle Inspection Power Source" as per the technical specification, BHEL commercial terms & conditions applicable (to be downloaded from web site www.bhel.com and https://eprocure.gov.in/epublish/app)		01 No.
Important points to be taken care during submission of offer: 1. Delivery terms shall be F.O.R BHEL Stores, BHEL POWER PLANT PIPING UNIT, THIRUMAYAM 622507, PUDUKOTTAI DIST. 2. Compliance Form No.: MM/CE/IND/12 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation. 3. Delivery required 3 months from the date of purchase order. 4. Erection & Commissioning period required 2 weeks from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C. 5. EMD: Not Applicable. 6. 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/GENL001/NO EMD), commercial Terms check list (Compliance Form) and Technical Specification can be downloaded from BHEL web site http://www.bhel.com or from Central Public Procurement Portal website https://eprocure.gov.in/epublish/app under Enquiry reference "2741900019". Note: this is not an E-tender, hence Vendors are requested to ensure that the offer is reaching physically at our office before 14:00 Hrs. on the date of tender opening.			
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  20/11/19.	

V. KARUNAKARAN
Dy. General Manager
Capital Equipment / MM
BHEL / Tiruchirappalli - 620 014

PART - A

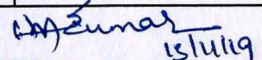
Qualifying Criteria for MPI POWER SOURCE of 1500Amps Rating

Sl. No.	Description for BHEL Requirement	Bidder's Offer
1	The BIDDER / VENDOR shall have a minimum of last FIVE Years of Continuous Experience in the Field of Design, Manufacture and Supply of Magnetic Particle Inspection (MPI) power source of 1500 Amps or above rating and associated accessories. Vendor shall indicate the actual no. of years of experience in the field.	
2	Only those BIDDER / VENDOR should quote who have supplied in the last 5 years at least 2 numbers of the model quoted against this tender of "MPI POWER SOURCE of 1500Amps or above Rating."	
3	Number of MPI POWER SOURCES of 1500Amps or above rating supplied, installed and commissioned till date.	
4	Year of Launch of the Model quoted against this tender enquiry	
5	The BIDDER has to submit a Performance Certificate from customers who are Heavy Engg. Fabricators like Manufacturers of Pressure Vessels and Heat-Exchangers, Off-Shore Oil Rigs, Thermal Power Plant Equipment, etc. for satisfactory performance of the quoted model against this tender, for a minimum period of one year from the date of commissioning (as on original date of opening of tender).	
6	Details on SERVICE AFTER SALES Set-Up in India including the Addresses of Agents / Service Centres in India, to be furnished.	
7	BHEL reserves the right to verify the information provided by vendor. In case, it is found to be false/ incorrect, the offer shall get rejected.	

M. Harikumar
MOTE HARIKUMAR
Sr. Engineer / Qual NDTL
BHEL, Thirumayam-622 507

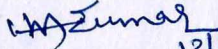
PART B
Technical Specifications for MPI POWER SOURCE of 1500Amps Rating

Sl. No.	Description for BHEL Requirement	BHEL Parameters	Offered Parameters / Confirmation	Bidder's Offer (with technical details)
1	Application			
1.1	For magnetic particle examination of all shapes of ferromagnetic product forms in boiler components, Pressure vessels, Heat exchangers and Structural components. It includes butt joints, fillet welds coming in nozzles and attachments, air-arc gouged surfaces, etc. using copper based prods. Maximum prod spacing used for examination will be 200 mm (8") and also to use for demagnetization requirements.		bidder to note	
2	Specifications			
2.01	Maximum Output	1500 Amperes at the end of 2 x 5 meter cable	bidder to specify	
2.02	HWDC Output [Half Wave DC]	Supplier to specify for 50% duty cycle and for use with 2 x 5 meter cables.	bidder to specify	
2.03	Maximum ON & OFF Time	Adjustable to select in a range of 0 - 60 secs. (with Timer Control)	bidder to specify	
2.04	Cable Size	Shall be a minimum of 90 sq.mm, but not more than 120 sq mm; and shall be of Copper Conductor with proper insulation.	bidder to specify	
2.05	Current Control	Step-less Control for the specified range, with Solid State SCR /Thyristor Controls	bidder to specify	


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2.06	Ammeter	AC and HWDC Ammeters	bidder to specify	
2.07	Trigger Control at Prod Handle	Through a low voltage control system - 24 V or less	bidder to specify	
2.08	Weight of Equipment	Shall be of Light Weight for easy handling. Weight shall not be more than 70kg.	bidder to specify	
2.09	Trolley	Suitable portable Transport trolley to accommodate and move the unit with cables. The trolley should have four wheels of revolving type and rubberized wheels of min 200 mm dia. (Sketch of trolley to be enclosed). Suitable hooking arrangement to be provided for lifting the complete unit with trolley	bidder to specify	
2.10	Facility for Demagnetization	Suitable Control Systems with Circuitry to be provided for using the equipment for demagnetization. Bidder to provide the Technical Details of how the feature is achieved.	bidder to specify	
2.11	Input Power Supply	Through 230 V / 50 Hz / 30 Amps Single Phase AC (Neon Pilot Lamp to be provided)	bidder to specify	
2.12	Input power cable	Flexible Input Power Supply 3-Core Cable – 20 Meter long with multi-strand copper conductor	bidder to specify	


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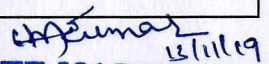
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2.13	kVA Rating	Bidder to specify the maximum electric power consumption in kVA, at peak loading.	bidder to specify	
2.14	Class of Insulation	Shall be of "F" Class	bidder to specify	
2.15	Tapping for Inspection Lamp	One number of 24 V Tapping Point shall be provided for using Hand Lamp for Inspection	bidder to specify	
2.16	Automatic Over-Load Protection		bidder to specify	
2.17	Cooling	Suitable Fan shall be provided to have an effective Air Cooling means.	bidder to specify	
2.18	Over-Heat Protection		bidder to specify	
2.19	Overall Dimensions of Equipment		bidder to specify	
2.2	All Hardware components	All equipment external parts like electrical components, switches, connectors, cable lugs etc which are frequently handled and used shall be sturdy and supplier shall assure that these parts are not flimsy and are reliable for trouble free operation in shop floor conditions. All electronic components shall be of high quality and reliable for trouble free operation in shop floor conditions.	bidder to confirm	


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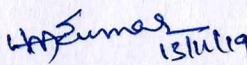
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3	GENERAL:		
3.1	Operation and Maintenance Manuals in Hard Copies and ONE set in soft copy in CD/Pen Drive/Memory Stick.	bidder to confirm	
3.2	O & M Manuals shall contain complete electrical/electronic circuit diagrams with Bill of Materials (indicating specification & make of components used).	bidder to confirm	
3.3	Moreover, the O & M Manuals shall also give details on Trouble Shooting, Preventive Maintenance Check-Lists, Circuit Diagrams of PCB used.	bidder to confirm	
3.4	Calibration Certificate for Main Equipment and Spare Ammeters as per ASTM E709, Local Centre of National Laboratory.	bidder to confirm	
3.5	Test Report for Internal Short Circuit Check	bidder to confirm	
3.6	Dimensional Report for Magnetic Particle Field Indicator as per ASTM E 1444	bidder to confirm	
3.7	Dimensional Report for System Performance Test Plate	bidder to confirm	


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4	Spares		
4.1	Vendor shall provide a list of essential spares for 2 years of trouble free operation of the equipment.	bidder to confirm	
5	Pre dispatch Inspection:		
5.1	The Equipment shall be offered for Inspection by BHEL, prior to despatch from the Vendor Works.	bidder to confirm	
6	Commissioning & Training		
6.1	Bidder has to depute qualified Service Engineer for the Installation, Commissioning and prove out of the Equipment at BHEL Works	bidder to confirm	
7	Guarantee		
7.1	The Performance of the Equipment shall be guaranteed for a minimum period of 12 months from the date of commissioning or 18 months from the date of despatch whichever is earlier.	bidder to confirm	


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