

**BHARAT HEAVY ELECTRICAL LIMITED****UNIT'S ADDRESS****UNIT'S PHONE NOS.****CONTACT PERSON'S NAME/DESIGN./PHONE NO./E-MAIL
(FROM PURCHASE DEPTT.)****Enquiry No. :****Due Date :****Supplier Qtn.****Date :****SPECIFICATION FOR THYRISTORISED WELDING RECTIFIERS - QTY-05 SETS****NOTE:-**

1. Vendor must submit complete information against clause no. 27 The offer meeting this clause would only be processed.
2. 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 and lead to disqualification of the offer.
3. The offer and all documents enclosed with offer should be in English language only.

ADDRESS OF THE SUPPLIER :		ADDRESS OF THE INDIAN AGENTS :			
TELEPHONE NOS.:		TELEPHONE NOS.:			
FAX NOS.:		FAX NOS.:			
E-MAIL ADDRESS :		E-MAIL ADDRESS :			
SNO	DESCRIPTION FOR BHEL REQUIREMENT	VENDOR TO	OFFERED	DEVIATIONS	REMARKS
1.0	Purpose : for Shielded metal arc welding	Confirm			
1.1	Current range : 50-600Amps	Confirm			
1.2	Current @ 60% duty cycle. : 500 amps minimum	Confirm			
1.3	Current @ 100% duty cycle.	Specify			
1.4	Input supply : 415 V +/- 10%, 3 Phase, 50 Hz	confirm			
1.5	Open Circuit voltage : 70 - 80 V	confirm			

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2.0	Winding material : Copper	Confirm			
3.0	Cooling : Forced Air	confirm			
4.0	Insulation : Class 'H'	confirm			
5.0	Protection clause : IP 23	confirm			
6.0	Ammeter & Voltmeter :Analog type with auto cut off to protect overload.	confirm			
6.1	Ammeter & Voltmeter to be separate and Ammeter shall be upper side of volt meter OR ammeter and volt meter should be side by side, for easy replacement of Ammeter	Specify			
6.2	Built in power saving device to be provided	confirm			
7.0	Current regulation : Remote control unit , for current control with 15 mtrs cable	confirm			
8.0	Equipment shall be mounted on heavy duty wheels.	confirm			
9.0	Lifting hook to be provided for movement of machine by crane.	confirm			
10.0	Equipment outer casing shall be Electrostatic powder coated.	confirm			
11.0	Standard power cable shall be supplied min.10mtrs long along with equipment for input supply from the mains.	confirm			
12.0	Each machine to be provided with 10mtrs (welding cable of 90 Sq mm flexible rubber copper cable) 600amps capacity with 600 amps welding holder at one end and lug of 600 amps capacity at the other end	Confirm			
12.1	Each machine to be provided with 5 mtrs (welding cable of 90 Sq mm flexible rubber copper cable) earthing cable of 600 amps capacity and fitted with heavy duty earth clamp at one end and 600 amps lug at the other end	confirm			
13.0	Standard accessories to be quoted seperately	Vendor to quote			
14.0	BHEL engineers will inspect the equipment at suppliers works before despatch.	Confirm			
15.0	Vendor to operate machine at vendors works and demonstrate all the features of the machine	Confirm			
16.0	Calibration certificate to be provided during predispatch inspection	Confirm			
17.0	Procedure for calibration after use, details shall be submitted along with equipment.	confirm and furnish			
18.0	Spares required for 2 years normal operation to be quoted seperately.	Quote			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	VENDOR TO	OFFERED	DEVIATIONS	REMARKS
18.1	ADDITIONAL SPARES - FOLLOWING SPARES TO BE QUOTED SEPERATELY	to be quoted seperately , item wise			
18.2	Ammeter and volt meter set - 1 set (for each machine)				
18.3	Current regulator , External regulator - 1 No and internal -1 No (for each machine)				
18.4	Set of Thyristor- 1 set (for each machine)				
18.5	Power supply pcb, control pcb and any other pcbs - each type- 2sets (for FIVE machines)				
18.6	Primary coil -1 no (for each machine)				
18.7	Secndry tapping and plates , Out put terminals -2 sets (for each machine)				
18.8	Air cooling fan -1 nos (for each machine)				
19.0	AMBIENT CONDITIONS & THERMAL STABILITY :				
19.1	Total machine should work trouble free and efficiently under following operating conditions. Power Supply: Voltage: 415 V +10% / -15% Frequency:50Hz ± 3% No. of phases = 3 ;Ambient Conditions: Temperature = 5 to 45 degree celsius Relative Humidity = 95% max.	confirm			
19.2	Tropicalisation: All electrical / electronic equipment shall be tropicalized	confirm			
20.0	GENERAL				
20.1	Make of the machine :	Specify			
20.2	Model no:	Specify			
20.3	The over all dimension for the power supply unit shall be provided	Specify			
20.4	The equipment shall be mounted on wheels	confirm			
20.5	Total weight of the machine	Specify			
20.6	Delivery: 6 Weeks	confirm			
21.0	GUARANTEE: 24 months from date of commissioning.	confirm			
22.0	INSPECTION: At vendors works before despatch by BHEL Engineers. 100 % , 60 % load testing with stipulated intervals is to be carried out at vender work in presence of BHEL Engineers	confirm			
23.0	Commissioning & PROVE OUT: at BHEL works .	confirm			

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24.0	DOCUMENTATION: 5 sets of operation manuals to be supplied along with the machine.	confirm			
24.1	5 sets of Electrical /electronic Circuit diagrams of the machine to be provided with the machines	confirm			
25.0	PACKING:				
25.1	Rigid packing for all items of complete machine, all accessories and other supplied items to avoid any damage/loss in transit.	confirm			
26.0	TRAINING : BHEL Persons should be trained at BHEL Works for a period of one week in the area of (a) Operation of the machine for 4 WELDERS (b) Electrical / Electronic maintenance for machine (c) Mechanical maintenance of the machine	confirm			
27.0	REFERENCE LIST / QUALIFYING CONDITIONS :				
	Only those vendors, who have supplied and commissioned atleast one Machine of similar Capacity, Rating, or higher for similar applications in the past ten years (On the Date of Opening of tender) and such machine is working satisfactorily for more than one year, after commissioning (On the Date of Opening of tender) should quote. The following information should be submitted by the vendor where similar machines have been supplied. This is required from all the vendors for qualification of their offer.	Confirm			
27.1	Name of the customer / company where similar machine is installed.	vendor to furnish details			
27.2	Complete postal address of the customer.				
27.3	Month & Year of commissioning.				
27.4	Phone, FAX no. and email address of the contact person of the customer.				
27.5	Performance certificate/PO/Installation report from the customers regarding satisfactory performance of machine supplied to them.				
27.6	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/incorrect the offer shall be rejected.	vendor to note			