



BHARAT HEAVY ELECTRICALS 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. No.: _____

Date : _____

**SPECIFICATION CUM COMPLIANCE CERTIFICATION FOR
PORTABLE WELDING RECTIFIER**

NOTE:-

1. Vendor must submit complete information against each clause

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.

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

ADDRESS OF THE SUPPLIER :		ADDRESS OF THE SUPPLIER :			
TELEPHONE NOS.:		TELEPHONE NOS.:			
FAX NOS.:		FAX NOS.:			
E-MAIL ADDRESS :		E-MAIL ADDRESS :			
SCOPE : SUPPLY & COMMISSIONING OF 1000 AMPS PORTABLE WELDING MACHINE COMPLYING WITH SPECIFICATION AS BELOW.					
SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
1.0	MAIN PARAMETERS				
1.1	PURPOSE	For Carryout all Repair Welding works and nozzles Welding for casing			
2.0	TECHNICAL PARAMETERS				
2.1	Output current RANGE	100-1000 Amps			
2.2	Duty cycle requirement	60%			
2.3	Type of Machine	Thyrister based			
2.4	Welding electrode range	dia 1.6 - 10.0 mm			

SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.5	Earthing cable with clamp	5 mtrs			
2.6	Electrode cable with holder (2 no.s)	5 mtrs			
2.7	Open Circuit voltage	100V			
2.8	In built VRD	Confirm			
2.9	Max. KVA Rating	56 KVA			
3.0	GENERAL :				
3.1	Weight of the full unit	as per vendor design			
4.0	ELECTRICAL :				
4.1	400 Volts (-15% + 15%)	415 volts 3 phase			
4.2	Frequency	50 Hz			
4.3	Primary current Max rated	72 Amps			
4.4	Input cable section	18 sq.mm			
4.5	Welding cable	120 sq.mm			
4.6	Insulation class	H			
4.7	Protection class	IP23			
4.8	Cooling	Forced Air			
4.9	Standard	confirms to IS 4559			
5.0	SAFETY ARRANGEMENTS:				
	1. Welding machine should have adequate and reliable safety features/ devices to avoid damage to the welding machine due to the malfunctioning or mistakes.	Vendor to confirm			
6.0	ENVIRONMENTAL PERFORMANCE OF THE MACHINE :				
	The welding machine system should conform to following factor related to environment :	Vendor to confirm			
	If any safety / environmental protection enclosure is required it should be built in the machine by the vendor.	Vendor to confirm			
7.0	SPARES:				

SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
7.1	All types of spares for total welding machine and accessories should be available for atleast ten years after supply of the of the welding machine 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	Vendor to confirm			
7.2	Vendor to confirm that complete list of spares for welding machine and accessories, along with specification / type / model, and name & address of the spare supplier shall be furnished along with documentation to be supplied with the welding machine	Vendor to confirm			
8.0	DOCUMENTATION : Five sets of following documents (Hard copies) in English language should be supplied along with the machine	Vendor to confirm			
8.1	Operating manuals of welding machine	Vendor to confirm			
8.2	Detailed Maintenance manual of welding machine with all drawings of system.	Vendor to confirm			
9.0	COMMISSIONING				
9.1	Supplier to take full responsibility for testing of welding machine with all supplied items. The supplier shall commission the machine at BHEL works and prove the performamance. Service requirement like power, air shall be provided by BHEL at only one point to be indicated by supplier.	Vendor to confirm			

SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
9.2	Charges, duration, terms & conditions for Commissioning should be furnished in detail separately by vendor along with offer.	Vendor to confirm			
9.3	BHEL Persons should be trained regarding operation and maintenance of the machine	Vendor to confirm			
10.0	AMBIENT CONDITIONS & THERMAL STABILITY :				
10.1	Total machine and all supplied items should work trouble free and efficiently under following operating conditions. Ambient Conditions: Temperature = 0 5 to 45 degree celsius Relative Humidity = 95% max. (Vendor to confirm that machine is suitable for above)	Vendor to confirm			
11.0	ACCEPTANCE: (Tests/Activities to be Performed by Vendor)	Should be accepted & confirmed by Vendor			
	Tests/Activities to be carried out at BHEL works while commissioning the machine :				
11.1	The machine should be tested for welding continuously for 8 hrs. If any break down occurs during this test, the test should be repeated for 8 hrs from that time.	Vendor to confirm			
11.2	Prior to despatch , inspection of welding rectifiers to be carried out at vendors works by BHEL.	Vendor to confirm			
11.3	Demonstration of all features of the welding machine & accessories to the satisfaction of BHEL for efficient and effective use of the system.	Vendor to confirm			

SL.NO.	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
12.0	PACKING:				
12.1	Rigid packing for all items of complete system, all Accessories and other supplied items to avoid any damage/loss in transit.	Vendor			
13.0	GENERAL :				
13.1	Model No.	vendor to furnish			
13.2	Dimensions (Length, Width, Height) for complete welding machine	vendor to furnish			
13.3	Total weight of the welding machine	vendor to furnish			
13.4	Vendor to submit , along with offer, reference list of customers where similar welding machines have been supplied mentioning broad specifications of the supplied welding machines	vendor to furnish			
13.5	Detailed catalogues , sketch/ photographs of the welding machine and accessories should be submitted with the offer.	vendor to furnish			
13.6	Delivery Period	6 to 8 weeks			