

 BHARAT HEAVY ELECTRICAL LIMITED					
<u>SPECIFICATION FOR INVERTER BASED WELDING MACHINE - QTY-01 SET</u>					
NOTE:-					
1. Vendor must submit complete information against clause no.10.00 The offer meeting this(Pre qualification Criteria-PQC) 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 : Suitable for Welding, Electrode Size: upto 6.0 mm (General welding purpose during maintenance of cranes)	Confirm			
1.01	Current range : 20-400Amps	Confirm			
1.02	Current @ 60% duty cycle : 400 amps	Specify			
1.03	Current @ 100% duty cycle : 310 amps	Specify			
1.04	Input supply : 415 V +/- 15%, 3 Phase, 50 Hz	confirm			
1.05	Open Circuit voltage : Between 65 - 80 V	confirm			
1.06	IGBT based control	confirm			
1.07	Cooling : Forced Air	confirm			
1.08	Insulation : Class 'H'	confirm			
1.09	Protection clause : IP 23	confirm			
1.10	Ammeter & Voltmeter :Analog type with auto cut off to protect overload.(preferably)	confirm			
1.11	Total weight of the machine (Should be less than 50Kgs)	confirm			
1.12	Each machine to be provided with 5mtrs (Suitable welding cable with flexible rubber copper cable) 400amps capacity with 400 amps welding holder at one end and lug of 400 amps capacity at the other end	Confirm			
1.13	Each machine to be provided with 5 mtrs (Suitable welding cable with flexible rubber copper cable) earthing cable of 400 amps capacity and fitted with heavy duty earth clamp at one end and 400 amps lug at the other end	confirm			
1.14	Vendor to operate machine at vendors works and demonstrate all the features of the machine	Confirm			
1.15	Calibration certificate to be provided along with machine and soft copy to be sent to indenter	Confirm			
2.00	AMBIENT CONDITIONS & THERMAL STABILITY :				
2.01	Total machine should work trouble free and efficiently under following operating conditions. Power Supply: Voltage: 415 V +/-15% Frequency:50Hz ± 3% No. of phases = 3 ;Ambient Conditions: Temperature = 5 to 45 degree celsius Relative Humidity = 95% max.	confirm			
2.02	Tropicalisation: All electrical / electronic equipment shall be tropicalized	confirm			
3.00	GENERAL				
3.01	Makes: ESAB, ADOR, D&H only	Confirm			
3.02	Make of the machine :	Specify			
3.03	Model no:	Specify			
3.04	The over all dimension for the power supply unit shall be provided	Specify			
3.05	The equipment shall be mounted on wheels	confirm			
3.06	Total weight of the machine	Specify			
4.00	GUARANTEE: 24 months from date of commissioning.	confirm			
5.00	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 / or Standard test procedure as defined by vendor need to be followed (decided before dispatch)	confirm			
6.00	Commissioning & PROVE OUT: at BHEL works .	confirm			
7.00	DOCUMENTATION: Operation manuals,Electrical /electronic Circuit diagrams of the machine to be provided with the machine to be supplied along with the machine.	confirm			
8.00	PACKING:				
8.10	Rigid packing for all items of complete machine, all accessories and other supplied items to avoid any damage/loss in transit.	confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	VENDOR TO	OFFERED	DEVIATIONS	REMARKS
9.00	TRAINING : BHEL Persons should be trained at BHEL Works on (a) Operation of the machine (b) Electrical / Electronic maintenance for machine (c) Mechanical maintenance of the machine	confirm			
10.00	REFERENCE LIST / QUALIFYING CONDITIONS (PQC):				
	Only those vendors, who have supplied and commissioned atleast one Machine of similar Capacity, Rating, or higher for similar applications in the past seven years (On the Date of Opening of tender) and such machine is working satisfactorily for more than one year, after commissioning should quote. This is required from all the vendors for qualification of their offer. Relevant documentary evidence to be submitted. The following information should be submitted by the vendor where similar machines have been supplied.	Confirm			
10.01	Name of the customer / company where similar machine is installed.	vendor to furnish details			
10.02	Complete postal address of the customer.				
10.03	Month & Year of commissioning.				
10.04	Phone, FAX no. and email address of the contact person of the customer.				
10.05	Performance certificate from the customers regarding satisfactory performance of Machine supplied to them (Original certificate or Through E-mail directly from the customer) or P.O. Copy .The Original performance certificate may be returned after verification by BHEL, if required.				
10.06	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			

SVNVH Sumanth Saladi
Dy.Manager/M&S-Cranes Maintenance

GSD Gupta
Sr.DGM/M&S-Cranes,TPT