



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 79 38 Fax : +91 431 252 07 19 Email : tvenkat@bheltry.co.in Web : www.bhel.com
NOTICE INVITING TENDER	

TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two Parts	2631300052	01.07.2013	01.08.2013

You are requested to quote the Enquiry number date and due date in all your correspondence. 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	Quantity
10	Air-Arc Gouging Power Sources as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	4.00 Nos

Important points to be taken care during submission of offer

1. Material shall be delivered to
Indigenous Vendors:
FOR, BHEL, Stores
Power Plant Piping Unit
Thirumayam, Pudukkottai Dist.
2. Delivery required 2.50 months from the date of purchase order.
3. Checklist No: **TMM/IMP/04 and TMM/IND/04A** to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
4. 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 / GENL / 001**) including bank guarantee formats and list of consortium banks, commercial terms check-list 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) under Enquiry reference "2631300052".

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 Sr. Manager / Capital Equipment / MM
--	--

PART A**QUALIFYING CRITERIA FOR THE SUPPLY OF AIR-ARC
GOUGING POWERSOURCES****SECTION – I**

The BIDDER is expected to give complete details against each clause in the table given below and wherever necessary an additional sheet may be attached (giving clear reference number) to cover the required details.

S. No.	PARTICULARS	VENDOR's RESPONSE
1.0	Number of Years of Experience of the BIDDER (Original Equipment Supplier) in the field of design, manufacture and supply of Heavy Duty 'RECTIFIER / DIODE Based MOTOR-GENERATOR Type MANUAL AIR-ARC GOUGING POWERSOURCE ' in a Heavy Fabrication Shop .	
2.0	Number of Years for which the MODEL of Air-Arc Gouging Machine quoted against this TENDER ENQUIRY, are under manufacture.	
3.0	Comprehensive Details, on Performance Testing of Air-Arc Gouging Machines carried out at the Factory, to be furnished with the Technical Offer.	
4.0	Details on SERVICE-AFTER-SALES Set-Up in Southern Part of India, including the Address of Agents / Service Centres in India, to be furnished compulsorily.	
5.0	BIDDER to indicate the Country of Origin for the supply of welding machines. Machines manufactured in Countries like TAIWAN/CHINA/KOREA are not preferred.	

SECTION – II

The BIDDER has to compulsorily meet the following requirements to get qualified for submitting an offer for the Air Arc Gouging Powersource.

S. No.	REQUIREMENTS	VENDOR's COMMENTS
6.0	The BIDDER shall have a minimum of FIVE Years of Continuous Experience in the Design, Manufacture & Supply of Heavy Duty Air Arc Gouging Machines of Rating around 800 Amps. @ 60% Duty Cycle	

S. No.	REQUIREMENTS	VENDOR's COMMENTS
7.0	The BIDDER should have supplied similar Air-Arc Gouging Machines of higher ratings (800 Amps. and above) to Customers in India. Indicate the number of such welding machines sold in India.	
8.0	Reference List of Customers and Performance Certificate from TWO CUSTOMERS [Heavy Engineering Companies] with full contact details of CONTACT PERSON, who are the End Users of the MODEL (given under Clause No.7.0) Air-Arc Gouging Machines.	

SECTION – III

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

S.No.	REQUIREMENTS	VENDOR's COMPLIANCE
9.0	The BIDDER shall submit the offer in TWO PARTS - Technical [with PART A & PART B] & Commercial and Price Bid.	
10.0	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
11.0	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 for the scope of supply.	
12.0	BHEL will have the right to go for trial order for one number, for performance evaluation and acceptance, prior to effecting the supply of full quantity.	
13.0	Earlier performance & field experience (service support) with BHEL (if any) will be a reckoning factor for the technical qualification of the OFFER.	

PART B

TECHNICAL SPECIFICATIONS FOR MANUAL AIR-ARC GOUGING POWERSOURCE

S.No.	FEATURES	BHEL SPECIFICATION
1.0.0	APPLICATION :	
1.1	JOB NATURE	The powersource shall be suitable for Manual Air Arc Gouging Operations using Copper Coated Carbon Electrodes of 6 and 9 mm Diameter. The electrodes will be burnt continuously for more than 24 hours.
2.0.0	POWER SOURCE FEATURES :	
2.1	Type	The powersource can be Rectifier / Diode Based or Motor-Generator Type. [Inverter based design is not preferred from the point of view of application and maintenance cost.]
2.2	Rating	600 Amps @ 100% Duty Cycle or 800 Amps. @ 60 % Duty Cycle.
2.3	Current Range	50 to 800 Amps. with Stepless Variation . (Even minute variation i.e., increments of 20 Amp. in output current shall be achievable by the turn of the potentiometer knob)
2.4	Open Circuit Voltage	Minimum 75 Volts
2.5	Voltmeter & Ammeter	Factory installed Ammeter & Voltmeter on front panel with easy removal and replacement from front-side for meter calibration purposes
2.6	Remote Control Unit	For stepless variation of Welding Current during welding for the current range given under Clause 2.3
2.7	Power Input	415 ± 10% V AC, 3 Phase, 50 ± 3% Hz, 3 Wire System with a fourth wire for earthing .
2.8	Transformer Design	The primary and secondary coils of the power transformer shall be of copper windings. All the transformers shall be of 'module' design, so that easily separated from the main frame of the machine, during maintenance.
2.9	Insulation	Class "H"
2.10	Protection	Thermal / Overload / Short-Circuit
2.11	Under-Carriage	With hard rubber lined wheels for portability
2.12	Cooling	The powersource shall be 'force air cooled' with two fans of suitable rating, to withstand the continuous gouging operation in the peak ambient conditions.
2.13	Lifting Hook	Four numbers of lifting hook are to be provided at suitable locations, for lifting the powersource by EOT Crane Hoist.
2.14	Ambient Conditions	Temperature + 50 ° C ; Humidity 85 % (maximum), both not occurring simultaneously.
2.15	Painting	The Powersource outer steel sheet casing shall be painted Post Office Red and the front panel Carbon Black/Mat Finish in colour, by powder coating process.

S.No.	FEATURES	BHEL SPECIFICATION
3.0.0	REMOTE CONTROL UNIT :	
3.1	Application	For Stepless Variation of output current. Remote Control Unit to be provided with 15 mtrs. long control cable and fitted with end connectors.
3.2	Pattern / Type	Hand Operated (Box Type) with 3" dia. knob and with multi-turn potentiometer.
3.3	Operation	The Remote Control unit shall suit to the Current Range mentioned under Clause 2.3
4.0.0	SPARES :	
4.1	Power Source	Spares listed below shall be compulsorily quoted, itemwise (required for two years of operation on THREE shift basis) : a. Diodes / Rectifiers as per the case b. All type of Fuses c. Control-Transformers d. Printed Circuit Boards / PCBs – if used (all types coming in the electrical circuit) e. Variable Resistor f. Switches g. Cooling Fan h. Ammeter & Voltmeter i. Potentiometer j. Knobs, etc. k. Indicator Bulbs
4.2	Remote Control	Complete Set of Remote Control Unit as a spare to be OFFERED
5.0.0	GENERAL POINTS :	
5.1	Inspection	The equipment shall be offered for inspection at the supplier's works for performance evaluation (by conducting gouging trials) prior to despatch.
5.2	Commissioning	The equipment shall be commissioned at BHEL works by the supplier's representative.
5.3	Guarantee	The equipment shall be guaranteed for its performance and the service of the components, for a minimum period of twelve months from the date of commissioning.
5.4	Catalogue	The offer shall be accompanied with ORIGINAL product catalogues
5.5	Delivery Period	The equipment shall be offered for BHEL inspection at the supplier's works within 10 weeks from the date of purchase order release.
6.0.0	O & M MANUALS :	
6.1	No. of Copies	3 (Three) Copies in Original for Each Machine.
6.2	O & M Manual Details	Operation & Maintenance Manual (Service Manual) shall compulsorily contain a. general circuit diagrams with Bill Of Material and ratings b. details on PCBs, showing various electronic elements and their specifications and ratings c. trouble shooting chart, etc.