



# BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )  
HIGH PRESSURE BOILER PLANT  
PURCHASE DEPARTMENT - FOSSIL BOILERS  
THIRUCHIRAPALLI - 620014  
TAMILNADU (INDIA)

PHONE :2577645  
GRAMS : BHARATELEC  
FAX NO: 2520719  
E-mail: srchandran@bheltry.co.in  
Web:

429-002/A

	<b>Enquiry No</b>	<b>Enquiry Date</b>	<b>Due Date for Quotation</b>
	2691500038 - 41	12.05.2015	05.06.2015
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	Inverter based GMAW Power Source Detail Technical Specification and Prequalification criteria is given in the annexures	NO	1.000	1.00	07.07.15

### General Note:

1) Please submit your offer on F.O.R - BHEL, Trichy (Tamilnadu) basis and in two part (part-i: techno-commercial bid and part-ii: price bid) in a separate covers and both covers to be placed in an envelope which is super scribed with enquiry no, enquiry date and due date of tender opening.

2) If the offer is submitted in single part and the same will be liable for rejection.

3) All the Tenders may be addressed to the following address to

„The Tender Opening Cell/MM  
„Room No-26, Building - 24, Ground Floor  
„Bharat Heavy Electrical Limited  
„Tiruchirappalli- 620014.

4) In case personal delivery of the offer, it shall be dropped into the respective box after duly entering the data in the system kept in room no. 26.

5) Offers will be accepted received till 14.00 hrs on the due date. Therefore Vendors shall ensure to submit the offers before this time.

6) Vendors are requested to avoid submission of offers thro email / fax. In case of any unavoidable situation, offers shall be sent thro email to the following mail ID only

"tender\_ cell@bheltry.co.in"

7) Request for extension of tender opening will not be considered if the requisition reach us less than 48 hours of tender opening.

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

Yours faithfully,  
For **BHARAT HEAVY ELECTRICALS LIMITED**

*[Signature]*  
D. CHANDRAMOHAN  
Senior Manager / MM / RM  
Purchase / CP & SP  
BHEL, TIRUCHY - 620 014  
MANAGER / PURCHASE  
(FOSSIL BOILERS)  
Yours faithfully,

*[Handwritten Signature]* 12/5/2015



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Web:

2691500038 / 12.05.2015

8) Annexure- TERMS AND CONDITIONS enclosed herewith must be filled, signed and submitted along with your offer.

9) This tender is hosted in BHEL website vide nit ref. \_\_\_\_\_ dt. \_\_\_\_\_ and any corrigendum may please be viewed in the BHELwebsite ([http:// www.bhel.com](http://www.bhel.com))

10) Enclosure: annexure - iii & QUALIFYING CRITERIA FOR THE SUPPLY OF INVERTER CONTROLLED WELDING MACHINES FOR MIG/MAG/FCAW - O2 WELDING - 500 Amps.

12) MSME vendor guide lines will be followed for this tender

## Enclosures:

"LD clause has to be confirmed without fail."

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

Yours faithfully,  
For BHARAT HEAVY ELECTRICALS LIMITED

*[Signature]* 12/5/2015  
D. CHANDRAMOHAN  
Senior Manager / MM / RM  
Purchase / CP & SP  
BHEL, TIRUCHY - 620 014.  
MANAGER / PURCHASE  
(FOSSIL BOILERS)  
Yours faithfully,

**PART A**


QUALIFYING CRITERIA FOR THE SUPPLY OF  
INVERTER CONTROLLED WELDING MACHINES FOR MIG/MAG/FCAW - O2  
WELDING - 500 Amps.  
[60% Duty Cycle]

**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	VENDOS	RESPONSE
1.0	Number of Years of Experience of the BIDDER (Original Equipment Supplier) in the field of design, manufacture and supply of INVERTER CONTROLLED welding machines for MIG/MAG/FCAW and CO2 WELDING for Radiographic Quality Welding Applications for Pressure Parts Fabrication-	Vendor to Specify	
2.0	YEAR of LAUNCH of the MODEL quoted against this ENQUIRY-	Vendor to Specify	
3.0	Number of Inverter Controlled welding machines for MIG/MAG/FCAW - CO2 WELDING supplied, till date in the QUOTED MODEL-	Vendor to Specify	
4.0	Number of Inverter Controlled welding machines for MIG/MAG/FCAW- CO2 WELDING - 500 Amps. Rating with 60 % Duty Cycle supplied and commissioned till date for the following category of CUSTOMERS -	Vendor to Specify	
	a) High Pressure Boiler Industries		
	b) Ship Building Applications		
	c) Heat Exchangers / Pressure Vessels		
5.0	Details on International Standards followed in Design and Testing of Welding Machines-	Vendor to Specify	
6.0	Comprehensive Details, on Performance Testing of Welding Machines carried out at the Factory, to be furnished with the Technical Offer.-	Vendor to Specify	
7.0	Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of Agents / Service Centres in India, to be furnished compulsorily.-	Vendor to Specify	
8.0	BIDDER to indicate the Country of Origin for the supply of welding machines. Machines manufactured in Countries like TAIWAN/CHINA/KOREA are not preferred.-	Vendor to Specify	

**SECTION II**

  
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The BIDDER has to compulsorily meet the following requirements to get qualified for submitting an offer for the Inverter Controlled welding machines for MIG/MAG/FCAW - CO2 WELDING.

S. No.	REQUIREMENTS	VENDOR's COMMENTS
9.0	The BIDDER shall have a minimum of TEN Years of Continuous Experience in the Design, Manufacture & Supply of 'Inverter Controlled welding machines for MIG/MAG/FCAW - CO2 Welding.- Vendor to Specify	
10.0	The BIDDER should have supplied a minimum of 50 number of #Inverter Controlled Welding Machines for MIG/ MAG/FCAW - CO2 Welding, with rating 500 Amps. (@ 60 % Duty Cycle) and above to Customers in India. Indicate the number of such welding machines sold in India.- Vendor to Specify	
11.0	Reference List of Customers and Performance Certificate from minimum THREE CUSTOMERS [Heavy Engineering Companies] with full contact details of CONTACT PERSON, who are the End Users of the MODEL (given under Clause No.10.0) of 'Inverter Controlled Welding Machines for MIG/ MAG/ FCAW - CO2 Welding.- Vendor to Specify	


### 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
12.0	The BIDDER shall submit the offer- in TWO PARTS - Technical [with PART A & PART B] & Commercial and Price Bid. - Vendor to Specify	

13.0 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.

S.No.	REQUIREMENTS	VENDOR's COMPLIANCE
14.0	The BIDDER shall assure a continuous support for SPARES and SERVICE for TEN Years, from the date of commissioning of the equipment at BHEL Works.- Vendor to Specify	
15.0	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details / literature on the QUOTED MODELS of Welding Powersources.- Vendor to Specify	
16.0	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of	

  
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the Price-Bid, for confirmation for the scope of supply.-  
Vendor to Specify

17.0 Earlier performance & field experience (service support)  
with BHEL (if any) will be a reckoning factor for the  
technical qualification of the OFFER.- Vendor to Specify

18.0 The expected delivery period (including the time for Pre-  
Dispatch Inspection clearance by BHEL) for the welding  
machines is not more than six months from the date of issue of  
BHEL Purchase Order. In case the quoted delivery period  
extends beyond six months, an additional grace period of two  
months is permitted, but with a loading for arriving at the  
PRICE COMPETITIVENESS of the Offer (if the OFFER is  
technically acceptable on all accounts). Details are given  
in the commercial terms of the this tender - Vendor to Specify

**PART B**

TECHNICAL SPECIFICATIONS FOR 'INVERTER CONTROLLED WELDING  
MACHINES FOR MIG/ MAG/FCAW- CO2 WELDING. [500 AMPS.]

AA. APPLICATION :

Sl.No. FEATURES /BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

AA.1 The offered equipment shall be portable and suitable for  
semiautomatic

MIG/ MAG/ FCAW -CO2 welding process using flux-cored and solid  
wires of carbon steel, low-alloy steel and stainless steel and  
Aluminium.- Vendor to Specify

AA.2 The equipment shall be suitable for welding in all  
positions with pure  
argon, carbon-di-oxide or argon plus carbon di-oxide gas  
mixture as

Shielding gas and also for welding with self-shielded flux-  
cored wires.- Vendor to Specify

BB. MACHINE CONFIGURATION :

[The scope of supply shall consist of the following, for each  
machine]

Sl.No. FEATURES /BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS


BB.1 Welding Power source with Transport Trolley and Wheels  
- Vendor to Specify

BB.2 Wire Feeder Unit- Vendor to Specify

BB.3 Welding Torch for FCAW.- Vendor to Specify

BB.4 Remote Control Unit- Vendor to Specify

BB.5 Gas Regulators for (Ar + CO2 ) Gas Mixture or CO2 Gas or  
Ar Gas - Vendor to Specify

  
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- BB.6 CO2 Gas Pressure Regulator, Gas Guard, Flow#Meter and Heater Unit- Vendor to Specify
- BB.7 Set of inter-connecting cables/hoses with quick-fix end couplings- Vendor to Specify
- BB.8 Consumables & Spares including Teflon liner for Welding Torches - Vendor to Specify
- BB.9 Electrical & Mechanical Spares for Power source and Wire-Feeder- Vendor to Specify
- BB.10 Operation & Maintenance Manuals - Three Copies per Machine- Vendor to Specify
- BB.11 Commissioning of Equipment at BHEL Works and Performance
- Prove-out of the offered equipment by Supplier's representative - Vendor to Specify

CC. EQUIPMENT SPECIFICATION : POWERSOURCE FEATURES Sl.No.  
FEATURES BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

- CC.1 Type Inverter Controlled with IGBT and Constant Potential type, even with a fluctuation of  $\pm 10\%$  in the Input Voltage- Vendor to Specify
- CC.2 Switching Frequency BIDDER has to indicate the Switching Frequency of the Inverter Circuit and the make of IGBT used - Vendor to Specify
- CC.3 Current Rating 500 Amps. @ 60 % Duty Cycle with suitability for Working at a minimum of 380 Amps. at 100% Duty- Vendor to Specify Cycle.
- CC.4 Operating Range :- Vendor to Specify
- a) Voltage
- b) Current
- 20 Volts to 50 Volts (continuous control)
- 50 Amps. to 500 Amps. (continuous control)
- CC.5 Open Circuit Voltage BIDDER to mention the Open Circuit Voltage for the offered Power source - Vendor to Specify
- CC.6 Current Setting The variation in the set value of the welding current to the actual value, shall not exceed 1 %.- Vendor to Specify
- CC.7 Voltmeter & Ammeter Factory Installed Ammeter & Voltmeter on the front panel with easy removal and replacement (i.e., without lifting the top cover of the Power source) for instrument calibration- Vendor to Specify
- CC.8 Power Input 415  $\pm$  10% V AC, 3 Phase, 50  $\pm$  2% Hz, through a 3 Wire System [4th wire for EARTHING]  
- No Neutral Conductor - Vendor to Specify
- CC.9 Gas-Heater for CO2

  
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- Shielding Gas Provision of one Single Phase AC tapping point in the Power source, for the gas heater input power supply [110 V or 230 V - AC Supply]- Vendor to Specify

CC.10 Auxiliary Power for Wire-Feeder Unit Low voltage (like 48 V/110V) auxiliary power

tapping point in the Power source- Vendor to Specify

CC.11 Arc Strike (F.A.S.) Instantaneous Arc Striking facility

(Fresh Arc Strike)- Vendor to Specify

CC.12 Weld Stop

Condition No globule formation at the wire tip , at the time of weld stopping- Vendor to Specify

CC. EQUIPMENT SPECIFICATION : POWERSOURCE FEATURES

[..contd...]

Sl.No. FEATURES BHEL SPECIFICATION OFFER BY BIDDER

DEVIATIONS

CC.13 Gas Flow Setting Gas Flow Check Push Button for Gas Solenoid

Valve actuation in weld switch in "OFF" position.- Vendor to Specify

CC.14 Insulation The Power source shall have Features like- Vendor to Specify

a) Gas / Wire Inching Facility

b) Spatter Control Facility

c) Gas Pre-flow / Post-flow Facility

d) Crater Control & Fill

CC.15 Insulation Class "H" preferred - Tropical Working Conditions- Vendor to Specify

CC.16 Machine Cooling Forced Air Cooling with interlock for tripping of the

Welding machine.- Vendor to Specify

CC.17 Protection

[BIDDER has to specifically furnish technical details on

how these

protective

measures are

addressed in the

Machine Design] - Vendor to Specify a) Inbuilt protection for the IGBT/Power source

against Thermal / Overload / Short-Circuit Conditions.

b) All PCBs shall be sprayed with mould coating to prevent damage from dust and grinding Particles.


c) Machine Design to ensure proper earthing for the machine and its peripherals

  
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- d) Measures to nullify the effects of EMI  
(Electro-Magnetic Induction) generated
- CC.18 Portability Under-Carriage with hard rubber lined wheels for portability of the power source by manual pushing- Vendor to Specify
- CC.19 Ambient Conditions Temperature upto + 50 ° C ; Humidity up to 90 % but both upper limits do not occur simultaneously.- Vendor to Specify
- CC.20 Load Compensation Output variation due to line voltage fluctuation, cable heating or drift due to the use of long cable, to be eliminated.- Vendor to Specify
- CC.21 Power Rating BIDDER to indicate the Maximum Power Rating [in kVA] of the Power source and the NO-LOAD Power Consumption in Watts.- Vendor to Specify
- CC.22 Power Source Model To Specify the Model of Power source Offered- Vendor to Specify

DD. EQUIPMENT SPECIFICATION : WIRE-FEEDER UNIT FEATURES  
Sl.No. FEATURES BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

- DD.1 Type 4-Roll Drive [All Powered Drive Wheels]- Vendor to Specify
- DD.2 Burn-Back Control Compulsorily to be provided- Vendor to Specify
- DD.3 Wire Sizes/Solid 0.8 mm to 1.6 mm (Solid Wires)- Vendor to Specify
- DD.4 Wire Sizes/Cored 1.2 mm to 2.0 mm (Self-Shielded and Flux Cored Wires also)- Vendor to Specify
- DD.5 Wire Feed Speed 1.0 to 18.0 mtrs. / min.
- DD.6 Wire Feeder Motor BIDDER has to indicate the Type of Motor used for wire feeding- Vendor to Specify
- DD.7 Wire Spool Weight Facility to hold wire spools of 15 to 20 kgs. of weight and spool diameter of 300 mm- Vendor to Specify
- DD.8 Brake Torque on Wire Feeder Hub Shall be of adjustable type.- Vendor to Specify
- DD.9 2 / 4 Track Facility Torch latching facility to be provided compulsorily- Vendor to Specify
- DD.10 Feed Rolls & Guides Suitable for 1.2mm & 1.6mm Solid/Cored wires Suitable for 2.0 mm & 2.4 mm Self-Shielded Flux- Cored Wires- Vendor to Specify
- DD.11 Connector for Torch Euro / Unitized Connector with polymedium cable - Vendor to Specify
- DD.12 Inter-connecting

  
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cables/hoses

assembly 10 metres long power & control cables and gas hose assembly with plug-in and quick-fix end connectors to connect the powersource and the wire-feeder.- Vendor to Specify

DD.13 Wire-feeding

Capacity Shall be suitable for feeding welding wire through Welding Torches with 3.0 metre long & 4.5 metre long cables [without the use of additional push or pull motor in the wire-feed line]- Vendor to Specify

DD.14 Wire Feeder Model To specify the Wire-Feeder Model & Weight- Vendor to Specify

EE. EQUIPMENT SPECIFICATION : WELDING TORCH FEATURES AND GAS GUARD

S.No. ITEMS BHEL SPECIFICATION OFFER BY BIDDER DEVIATIONS

EE.1 Make OTC / KEMPPI/ Miller or Any internationally reputed make.- Vendor to Specify

EE.2 Type Goose-Neck, Gas cooled- Vendor to Specify

EE.3 Shielding Gas CO 2 , Argon or Mixture of CO 2 & Argon - Vendor to Specify

EE.4 Cable & Connector Polymedium Cable, Euro / Unitized Connector

Adapter - Vendor to Specify

EE.5 Wire Sizes/Solid 0.8 mm to 1.6 mm- Vendor to Specify

EE.6 Wire Sizes/Cored 1.2 mm to 2.0 mm- Vendor to Specify (Self-Shielded / Flux-Cored Wires)

EE.7 Wire Material Carbon & Low Alloy Steel, Stainless Steel, Aluminium- Vendor to Specify

EE.8 2 / 4 Track Facility Compulsorily to be provided in the Torch- Vendor to Specify

EE.9 Type A) Rating 300 / 350 Amps. @ 60 % Duty Cycle Torch

with 3.0 metre long cable.- Vendor to Specify

EE.10 Type B) Rating 300 / 350 Amps. @ 60% Duty Cycle Torch

with 4.5 metre long cable.- Vendor to Specify


EE.11 Torch Models &

Weight To specify the Models and the Torch Weight for Type A and Type B in the OFFER- Vendor to Specify

EE.12 Gas Guard A device to stop welding if there is any drop

in the gas pressure to avoid weld defects- Vendor to Specify

FF. EQUIPMENT SPECIFICATION : REMOTE CONTROL UNIT FEATURES

  
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S.No. PARTICULARS BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

FF.1 Type Hand Operated with 10 mtrs. long control cable  
with Display and end connectors - Vendor to Specify  
FF.2 Control Stepless Variation of Welding Current &  
Voltage- Vendor to Specify  
FF.3 Connection Remote Control Unit to be connected to the  
Wire-Feeder- Vendor to Specify

GG. EQUIPMENT SPECIFICATION : PULSE CONTROL UNIT  
FEATURES

Sl.No. FEATURES BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS


GG.1 Application Compatible to the Power source described  
under Clause 3.0.0 having built-in/external High Frequency  
Unit.- Vendor to Specify  
GG.2 Power Supply To work on the auxiliary power supply from  
the power source .- Vendor to Specify  
GG.3 Front Panel Controls To provide :- Vendor to Specify  
a. Peak Amperage adjustment  
b. Back-ground Amperage adjustment  
c. Pulses per Second adjustment  
d. Pulser-Unit On/Off  
e. Power On/Off  
f. Amperage Remote/Panel Control  
g. Remote Control Receptacle  
h. Gas Pre-flow & Post-flow Time Control  
i. Welding Current Up-slope & Down-slope  
Time Control  
GG.4 Pulse Time Control Preferred 0 to 200 Pulses per second-  
Vendor to Specify  
GG.5 Current Up-slope Preferred 0.1 to 10 seconds- Vendor  
to Specify  
GG.6 Current Down-slope Preferred 0.1 to 20 seconds- Vendor  
to Specify  
GG.7 Purge Gas Pre-flow Preferred 1.0 to 30 seconds- Vendor  
to Specify  
GG.8 Purge Gas Post-flow Preferred 1.0 to 60 seconds- Vendor  
to Specify

JJ. EQUIPMENT SPECIFICATION : GAS REGULATOR, FLOW METER &  
HEATER

S.No. PARTICULARS BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

JJ.1 Function To regulate CO2 Gas Pressure, Flow Rate and for  
Heating the CO2 Gas, to avoid ice formation.- Vendor to  
Specify

S.No. PARTICULARS BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

  
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JJ.2 Power To draw from Single Phase AC Power Supply from Power source (110 V or 230 V - AC) thro' a 2 M Cable- Vendor to Specify

JJ.3 Pressure Gauges Preferred to have 2 Nos,- To indicate independently cylinder pressure and gas delivery pressure- Vendor to Specify

JJ.4 Accessories Double glass covered flow-meter, power cable with end-connectors, electrical heating unit, Gas Guard etc.- Vendor to Specify

KK. SPARES :

S.No. PARTICULARS BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

KK.1 Power Source All type of Spare Parts including the following items :- Vendor to Specify

- a. IGBT Kit
- b. All Types of Fuses
- c. Control - Transformers
- d. Printed Circuit Boards / PCBs - All Types
- e. Rectifiers, Thermistors, Capacitors
- f. Switches and Knobs
- g. Cooling Fan Motor
- h. Ammeter & Voltmeter
- i. Potentiometer
- j. Relays & Timers
- k. Receptacles
- l. Control Cable with End Connectors
- n. Filters
- o. Welding & Return Cable Connectors

  
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- p. Coolant Feed Pimp
- q. Auxiliary Power Cable with End Connectors
- r. Coolant Hose with Quick Fix End Connectors

are to be COMPULSORILY QUOTED (with Unit Rate) for one powersource required for 2 years of operation on THREE shift basis for 365 Days in an year. To be LISTED

ITEMWISE

S.No.	PARTICULARS	BHEL SPECIFICATION	OFFER BY BIDDER
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	DEVIATIONS		
KK.2	Wire-Feeder Unit	Spares such as feed-rolls (suitable for 0.8, 1.2 , 1.6 and 2.0 mm dia. suitable for Solid & Cored Wires), wire-feed motor, wire guides, control PCB cards, connectors, etc. shall be offered .- Vendor to Specify	

To be LISTED ITEMWISE

KK.3 Remote Control

Unit Complete Set of Remote Control Unit and its Spares like Knob, Potentiometer, etc. to be OFFERED- Vendor to Specify

KK.4 Welding Torch Consumables & Spares such as Liners & Contact Tip

(suitable for 0.8, 1.2 , 1.6 and 2.0 mm dia. Wires), Contact Tip Body, Gas Nozzles, Insulator, Orifice, 'O' Ring, Adaptor 'O' Ring, etc. shall be offered for all the three types of Torches.- Vendor to Specify

To be LISTED ITEMWISE.

LL. O & M MANUALS :

S.No.	PARTICULARS	BHEL SPECIFICATION	OFFER BY BIDDER
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DEVIATIONS

LL.1	No. of Copies	3 (Three) for Each Machine-	Vendor to Specify
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LL.2 Language English - Vendor to Specify

LL.3 Manual Details :- Vendor to Specify a. Manual shall contain all instructions for

machine installation and welding trial testing, in sequence.

b. Manual to give general circuit diagrams, showing the interconnection of various elements and also details on PCBs [Printed Circuit Board] like tapping voltages, main electronic elements' specifications and ratings, etc.

c. Manual to give other details like trouble shooting chart, weld parameters selection for various base metals, etc.

d. Master List of Parts & Spares used in the machine with Make, Model, Rating, etc.

MM. GENERAL POINTS :



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S.No. PARTICULARS BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

MM.1 Inspection The equipment shall be offered for inspection at supplier's works for performance evaluation by BHEL Engineers prior to despatch.- Vendor to Specify

MM.2 Commissioning The equipment shall be commissioned at free of cost by the supplier's representative at BHEL Works.- Vendor to Specify

MM.3 Training The Supplier's SERVICE ENGINEER shall give training in the Operation and Maintenance (mainly on electric/electronic troubleshooting) of the Machine for BHEL Staff, after the successful commissioning of the Welding Machines - Vendor to Specify

MM.4 Guarantee The equipment shall be guaranteed for a minimum of 24 months from the date of commissioning & performance prove-out at BHEL Works.- Vendor to Specify

S.No. PARTICULARS BHEL SPECIFICATION OFFER BY BIDDER  
DEVIATIONS

MM.5 Bought-Out Items- Vendor to Specify a) The Bought-Out Items - like Motors, ICs, Relays, Contactors, Switches, Electronic Elements, etc., used in the Powersource & Wire-feeder shall be of Internationally Reputed Manufacturers only.

b) BIDDER has to furnish the MAKE of Bought-Out Items used in the Welding Machine, with the OFFER .



D. CHANDRAMOHAN  
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BHEL, TIRUCHY - 620 014.

# COMMERCIAL TERMS& CONDITIONS

# ANNEXURE-III(m)

Bharat Heavy Electricals Limited, Tiruchirapalli – 620 014, Tamilnadu

MM: CP & SP

(Check List - to be filled and submitted along with Techno-Commercial Bid)

Sl. No.	BHEL Commercial Terms and Conditions for Indigenous Supplies	Vendor's Confirmation / Comments
1	Bid should be submitted in <b>Two Parts</b> . 1. Techno-commercial Bid (Part-I) and 2. Price Bid (Part-II) in a <b>separate sealed cover and both the covers must be placed in a Third Cover and Sealed. Our Enquiry No., Enq. Date &amp; Enq. Due date must be written on all Three covers</b>	
2	Technical confirmation to BHEL's Specification shall be furnished. If needed additional sheets shall be used.	
3	<b>Prices shall be quoted item wise only.</b>	
4	Delivery INCO TERMS- Price quoted <b>-FOR BHEL TRICHY, STORES or ex- WORKS Basis or, FOR WORKS (DESPATCHING STATION)</b> <b>In case of EX works / FOR WORKS basis, indicate the Despatching station.</b>  Prices shall be quoted on <b>"FIRM PRICE"</b> basis only.	
5	<b>Validity of offer</b> shall be for a minimum period of 120 days from the date of Tender opening	
6	<b>Delivery period</b> from the date of Letter of Intent / Purchase order	
7	Liquidated damages shall be 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value. For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).	
8	<b>Payment term for supply portion:</b> Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials. <b>Note:</b> Only Direct Payment after goods receipt & acceptance will be accepted .Above payment term acceptance is essential for consideration of your offer  <b>Any deviation in the above payment term will attract loading as mentioned below.</b> <b>"Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.</b>  Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Stores with Consignee copy attached. In this case Loading will be 3% on the offered value. Offers of indigenous Suppliers with payment terms as <b><u>LC/Advance Payment are liable for rejection.</u></b> <b>Important Note: BHEL will consider the ranking after the loading is applied as referred vide Sl. No. 7&amp; 8 above wherever deviations are observed.</b>	
9	<b>Following Risk Purchase clause</b> shall be applicable: The purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
10	<b>Erection / commissioning: (if applicable only)</b> Erection / commissioning charges if any has been mentioned in the offer or else confirmation that Erection / commissioning shall be done at free of cost is available in the offer.	
11	The equipment shall be guaranteed as per tender condition from the date of receipt & acceptance./(commissioning (commissioning date ,if applicable as per tender condition)  Normally No deviation permitted and the <b><u>deviated offers are liable for rejection.</u></b>	

**COMMERCIAL TERMS& CONDITIONS**

**ANNEXURE-III(m)**

12	Equipment will be inspected at vendor’s works prior to dispatch if applicable. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy, Tamilnadu.	
13	The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost.	
14	Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy, Tamilnadu basis.	
15	Performance Bank Guarantee, if applicable as per tender condition. Normally No deviation permitted and the <b><u>deviated offers are liable for rejection.</u></b>	
<b>OTHER DETAILS REQUIRED</b>		
16	% of Excise Duty with cess	
17	% of TAX (VAT) (TNGST with FORM-17)	
18	% of TAX (VAT) without form	
19	% of TAX (CST) (CST with C-FORM)	
20	% of TAX (CST) without form	
21	Packing & Forwarding Charges ( <b>in % only</b> )	
22	Freight& transit insurance charges, if any( <b>in % only</b> ) Freight charges from Dispatching station to BHEL, Tiruchirapalli (Note: If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only ,in this case the freight will be borne by BHEL)	
23	Approximate Net weight of the total consignment	
24	Approximate Gross weight of the total consignment	
25	Approximate Dimensions of the Consignment	
26	Name of the contact person	
27	Land Line Number	
28	Fax Number	
29	Mobile Number	
30	E-mail ID	
31	PAN No.	
32	CST No.	TIN No.

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) Applicable % of ED, Sales Tax -CST or VAT, Service Tax), Freight, Insurance and Installation and Commissioning Charges etc., are indicated in offer.

Full postal Address:

Signature & Office Seal of the vendor

**Note:-**

Your specific acceptances to our Payment terms, LD & Risk Purchase (RP) Clause are essential for consideration of your offer. Otherwise your offer is liable for rejection.  
No row shall be left blank. Please indicate NA, in case the item is “not applicable