

**SECTION - 1****Check-List & confirmations for submission of Tender**

We, M/s \_\_\_\_\_ hereby confirm the following:

| <b>Sl.</b> | <b>Description</b>   | <b>Bidder's response</b>  |
|------------|--|---|
| 1.         | <p>We have submitted our offer in 2-parts viz.,</p> <p><b>Technical-cum-Commercial Bid (Part-A) comprising of:</b></p> <p>(a) <b>Catalogue of offered Automatic Longitudinal SPM</b></p> <p>(b) Section 1 (This check list &amp; confirmations)</p> <p>(c) Section - 2 (Qualifying Criteria with all attachments)</p> <p>(d) Section - 3 (Technical Specifications)</p> <p>(e) Section - 4 (Filled-up "Key Commercial Aspects")</p> <p>(f) Unpriced copy of Price Bid</p> <p style="text-align: center;"><b>and</b></p> <p><b>Price Bid (Part B)</b></p> | <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> <p>YES / NO</p> |
| 2.         | The Technical offer has been supported by Product Catalogues and descriptions  | YES / NO  |
| 3.         | We assure continuous support for the supply of SPARES and SERVICES for 7 years from the date of commissioning of equipment at BHEL Works.  | YES / NO  |
| 4.         | We deal in manufacturing & supply of similar machines and we had supplied similar type of machines to our various Customers and the list is attached herewith.   | YES / NO  |
| 5.         | We have sealed both the parts of our Offer i.e., Part - A & Part - B in separate sealed envelopes and both these parts have then have been sealed in a third envelope. All these 3 envelopes have been properly superscribed with Tender No., Due date of opening etc.   | YES / NO  |
| 6.         | We agree that BHEL has all the rights to accept / reject any or all Tenders or part thereof without assigning any reasons thereto. BHEL's decision shall be final & binding upon us.   | YES / NO  |
| 7.         | We also agree that BHEL has the right to visit our Works before clearing our offer technically-cum-commercially and based on the observations during such visit BHEL may technically reject our offer  | YES / NO  |
| 8.         | We agree that BHEL has the right to go for Reverse Auction w/out opening the physical price bids and we agree to participate in the Reverse Auction process, if BHEL so decides.   | YES / NO  |

Signature & Seal of Bidder

**SECTION 2****Techno Commercial Bid**

Sub: Qualifying criteria for supply of: **Automatic Longitudinal Welding Machine**

The BIDDER has to compulsarily meet the following requirements to get technically qualified in this Tender. The "Vendor's Response" column has to be necessarily filled-in by the BIDDER in this prescribed format, as following:

| SL.NO. | QUALIFYING REQUIREMENT   | VENDOR'S RESPONSE   |
|--------|--|---|
| 1.0    | <p>1.1 Only those Bidders, who have supplied and commissioned at least ONE machine of similar rated capacity or more in the past 5 years and such machine is presently working satisfactorily for more than one year after commissioning (on the date of opening of this Tender) shall only qualify</p> <p style="text-align: center;"><b>OR</b></p> <p>1.2 If such machine has been supplied to BHEL, then it should be presently working satisfactorily for more than 6 months after its commissioning and acceptance (on the date of opening of this Tender) in BHEL shall only qualify</p> <p>NOTE: Performance certificate from the Customers (minimum 2) regarding satisfactory performance should be sent alongwith Technical Offer</p> | <p style="text-align: center;">AGREED</p> <p>PO No.: _____<br/>           PO Date: _____<br/>           Customer: _____<br/>           M/c description: _____<br/>           Commissioning date: _____<br/>           User Deptt.: _____<br/>           Contact Person: _____<br/>           Designation: _____<br/>           Contact No.: _____<br/>           Encl: _____ nos. Annexures</p> <p>PO No.: _____<br/>           PO Date: _____<br/>           Customer: _____<br/>           M/c description: _____<br/>           Commissioning date: _____<br/>           User Deptt.: _____<br/>           Contact Person: _____<br/>           Designation: _____<br/>           Contact No.: _____<br/>           Encl: _____ nos. Annexures</p> |
| 2.0    | <p>BHEL reserves the right to verify the information provided by the BIDDER. In case the information provided by the BIDDER is found to be false / incorrect, the offer shall be REJECTED</p>  |   |
| 3.0    | <p>In case, the bid is submitted by authorized agents / distributors, appropriate authorization certificate from Principals to be attached.</p>  |   |

Signature & Seal of Tenderer



**Part A (Techno-Commercial Bid)**

**Section 3**

**Specification cum Compliance Certificate for AUTOMATIC LONGITUDINAL SEAM WELDING SPM**

Scope: Design, Manufacturing, Supply, Erection & Commissioning of **AUTOMATIC LONGITUDINAL SEAM WELDING SPM** complying with the following specification

| S No.  | Description - BHEL's Requirement  | Specified   | Offered | Deviations | Remarks |
|--|---|---|---------|------------|---------|
| <b>1.0 PURPOSE &amp; WORK PIECE MATERIAL</b> |   |   |         |            |         |
| 1.1  | Purpose: Automatic Longitudinal Welding   | Full Welding  |         |            |         |
| 1.2  | Work Piece Material:  | Aluminium Alloy(Tensile strength 35kgf/mm <sup>2</sup> ) & mild steel |         |            |         |
| <b>2.0 SPECIFICATION</b>                     |   |   |         |            |         |
| 2.1  | MACHINE CONFIGURATION:Automatic Longitudinal MIG Welding Machine with Power Source 500 Amps @60% duty cycle, Feed Unit, Mig Torch Assembly, Seam Tracking System, Motorized Side Beam Carriage Unit for Torch Manipulation, Fixture for Job holding & resting, for Welding Aluminium Bus Duct of size mention under clause 2.2. | Vendor to confirm   |         |            |         |
| 2.1.1  | Power Source:-Synergic Pulse MIG or Double Pulse MIG type from reputed manufacturer capable of giving Radiographic Quality welding in aluminium Alloy e.g. Lincoln Electric, OTC Daihen.  | Vendor to confirm and give details with manufactures name & model     |         |            |         |
| 2.1.2  | Wire Feed Unit -Suitable For above  | Vendor to confirm and give details with manufactures name & model     |         |            |         |
| 2.1.3  | Torch Manipulation Unit   | Vendor to confirm and give details with manufactures name & model     |         |            |         |
| 2.1.4  | Motorised Side Beam Carriage of stroke length approx. 2500 mm with Controlled speed through Variable frequency drive. This Unit should house entire Torch Manipulation Unit, Wire Feeder Unit, Wire Spool Unit etc.   | Vendor to confirm and give details with manufactures name & model     |         |            |         |
| 2.1.5  | Torch Weaving Unit  | Vendor to confirm and give details with manufactures name & model     |         |            |         |
| 2.1.6  | Controlling Speed (Suitable for required welding)   | Vendor to specify   |         |            |         |
| 2.1.7  | Welding Speed (Suitable for required welding)   | Vendor to specify   |         |            |         |
| 2.1.8  | Job Holding Fixture:-It shall be such that the position of the joints is maintained as per requirement of welding system supplied. The welded joint shall be NDT (X Ray, DP Test) quality   | Vendor to confirm   |         |            |         |
| 2.1.9  | Option to weld Discontinuous welding at gap 400-500mm with welding length 100mm-200mm   | Vendor to confirm   |         |            |         |
| 2.1.10                                       | ESSENTIAL:-(a)Torch Weaving Unit for giving wider welding bead in a single pass having the following controls.  | Vendor to confirm   |         |            |         |
| 2.1.10.1                                     | Weaving speed 150-1500 mm/min   | Vendor to confirm   |         |            |         |
| 2.1.10.2                                     | Width Control   | Vendor to specify   |         |            |         |
| 2.1.10.3                                     | Left/Right Dwell Control  | Vendor to specify   |         |            |         |
| 2.1.10.4                                     | Centre shift control within the stroke length of the weaver   | Vendor to specify   |         |            |         |
| 2.1.10.5                                     | Stroke length of the torch weaving unit 75 mm approx.   | Vendor to specify   |         |            |         |
| 2.1.11                                       | ESSENTIAL: Video Monitoring System to capture the position in two views while welding through Monitor, so that the operator monitors the same in one place and adjusts the torch using joystick for fine tuning while welding. This unit shall comprise of :  | Vendor to confirm   |         |            |         |
| 2.1.11.1                                     | CCTV Camera with accessories  | Vendor to confirm   |         |            |         |
| 2.1.11.2                                     | Monitor   | Vendor to confirm   |         |            |         |
| 2.1.11.3                                     | Interconnecting cable accessories   | Vendor to confirm   |         |            |         |
| <b>2.2 CAPACITY &amp; SIZE</b>               |   |   |         |            |         |
| 2.2.1  | Drum Dia of Aluminium alloy At Following thickness  |   |         |            |         |
| a  | At tk 8 / 9 mm  | Ø1000 - Ø1800   |         |            |         |
| b  | At tk 15 / 16 mm  | Ø450 - Ø1030  |         |            |         |
| c  | At tk 6.35 mm   | Ø780 - Ø1000  |         |            |         |
| d  | At tk 4.78mm  | Ø680 - Ø780   |         |            |         |
| 2.2.2  | Continuous Welding Length   | 2000 mm   |         |            |         |

| S No.      | Description - BHEL's Requirement  | Specified                 | Offered | Deviations | Remarks |
|------------|---|---------------------------|---------|------------|---------|
| 2.2.3      | Motor Power   | Vendor to specify         |         |            |         |
| 2.2.4      | Working Height from floor level   | Vendor to furnish         |         |            |         |
| <b>2.3</b> | <b>CONSTRUCTION:</b>  |                           |         |            |         |
| 2.3.1      | Vendor to furnish details of material, hardness & constructional details, including explanatory drawings, of various components like Torch, frame, clamping & adjusting system, Lubrication system, etc .of the machine.  | Vendor to furnish         |         |            |         |
| 2.3.2      | Video images on CD including hard copy explaining the technical features / Literature with photographs, drawings explaining the technical features should be enclosed with the offer.   | Vendor to furnish         |         |            |         |
| 2.3.3      | The working principle of the above mechanism shall be explained clearly.  | Vendor to Confirm         |         |            |         |
| 2.3.4      | Digital display of major weld parameters like current, voltage, wire, speed, programme w.r.t. material / thickness etc  | Vendor to Confirm         |         |            |         |
| 2.3.5      | Any other feature if required   | Vendor to Confirm         |         |            |         |
| <b>3.0</b> | <b>OPERATION AND CONTROL SYSTEM:</b>  |                           |         |            |         |
| <b>3.1</b> | <b>CONTROL PANEL:</b>   |                           |         |            |         |
| 3.1.1      | Control Panel PLC based controlled panel unit which houses all the electrical and electronics accessories for the complete control and automatic operations   | Vendor to Confirm         |         |            |         |
| 3.1.2      | Control panel side and Layout showing complete details shall be submitted.  | Vendor to submit          |         |            |         |
| 3.1.3      | Machine shall be provided with main switch with key and signal light.   | Vendor to Confirm         |         |            |         |
| <b>4.0</b> | <b>OPERATOR PENDANT &amp; MANUAL CONTROL :</b>  |                           |         |            |         |
| 4.1        | The Operator Pendant provided with all the controls relevant for operator functions like Emergency stop,On/Off,Cycle start/Stop,Weld on/Off,Side beam carriage speed control,joy stick for Cross Slide adjustment,Auto/manual,etc.  | Vendor to confirm         |         |            |         |
| <b>5.0</b> | <b>First filling of all required Oils &amp; Grease etc.</b> to be supplied by vendor. Indigenous (Indian) source or Indian equivalent and specifications of oils/ greases are also to be provided by the vendor.  | Vendor to confirm         |         |            |         |
| 5.1        | Lubrication shall be life time lubricated wherever possible. Other lubrication points shall be of automatic type. Details shall be submitted.   | Vendor to confirm         |         |            |         |
| <b>6.0</b> | <b>ELECTRICAL :</b>   |                           |         |            |         |
| 6.1        | 415V + 10% / -10%, 50HZ +/-3 HZ, 3 Phase AC (3 wire system with out neutral) Power Supply Voltage will be provided by BHEL at a single point near the machine, as per layout recommended by Vendor. All types of cables, connections, circuit breakers etc. required for connecting BHEL's power supply point to different parts of the machine/control cabinets, shall be the responsibility of vendor. Requirement of grounding/earthing with required material details is to be informed by vendor well in advance so that same could be incorporated during construction of foundation. | Vendor to confirm         |         |            |         |
| <b>7.0</b> | <b>Tropicalisation:</b> All electrical / electronic equipment shall be tropicalized   | Vendor to confirm         |         |            |         |
| 7.1        | All electrical & electronic control cabinets & panels should be dust and vermin proof   | Vendor to confirm         |         |            |         |
| 7.2        | All electrical components in the cabinets should be mounted systematically  | Vendor to confirm         |         |            |         |
| 7.3        | Motors shall conform to IEC or Indian Standards   | Vendor to confirm         |         |            |         |
| 7.4        | All cables and cable trays required for the machine should be included in the offer.  | Vendor to confirm         |         |            |         |
| 7.5        | Vendor should ensure the proper earthing for the machine and its peripherals.   | Vendor to confirm         |         |            |         |
| 7.6        | The electrical components used shall be from reputed international makes such as Siemens / Telemecanique / Merlin Gerin / GE/ ABB and shall be accordance with DIN/IEC Standards.   | Vendor to confirm         |         |            |         |
| <b>8.0</b> | <b>SAFETY ARRANGEMENTS:</b>   |                           |         |            |         |
|            | Following safety features in addition to other standard safety features should be provided on the machine:  |                           |         |            |         |
| 8.1        | Machine should have adequate and reliable safety interlocks / devices to avoid damage to the machine, work piece and the operator due to the malfunctioning or mistakes. Details shall be submitted in the technical bid.   | Vendor to furnish details |         |            |         |
| 8.2        | Welding operation control through hand switch   |                           |         |            |         |
| 8.3        | In case of overloads due to wrong manoeuvres /malfunctions the machine should stop to avoid damage to machine and man.  |                           |         |            |         |
| 8.4        | Detailed list of safety alarms / indications provided on the machine shall be submitted along with the offer.   |                           |         |            |         |
| 8.5        | All the pipes, cables etc. on the machine should be well supported and protected. These should not create any hindrance to machine operator's movement for effective use of machine.  | Vendor to furnish details |         |            |         |
| 8.6        | Emergency Switches at suitable locations as per International Norms should be provided.   |                           |         |            |         |
| 8.7        | Necessary protection shall be provided to prevent from over loading.  |                           |         |            |         |

| S No. | Description - BHEL's Requirement   | Specified         | Offered | Deviations | Remarks |
|-------|--|-------------------|---------|------------|---------|
| 8.8   | Automatic Welding Machine to have adequate Safety Guards and interlocks. Bidder to submit details on these arrangements  |                   |         |            |         |
|       | <b>ENVIRONMENTAL PERFORMANCE OF THE MACHINE :</b><br>The Machine shall conform to following factors related to environment :<br>(a) Maximum noise & (b) maximum fume level shall be as per the national/ international norms. This will be measured as per international standards like DIN 45635-16. Supplier to mention the requirement of accoustic chamber/Enclosure separately and demonstrate compliance to fume & noise level, if so required.<br>(b) If any safety / environmental protection enclosure is required it should be built in the machine by the vendor.   | Vendor to confirm |         |            |         |
|       | <b>9.0</b>   |                   |         |            |         |
|       | <b>10.0 TOOLS FOR ERECTION, OPERATION &amp; MAINTENANCE :</b>  |                   |         |            |         |
| 10.1  | Special tools and equipment required for erection of the machine shall be brought by the vendor. Necessary tools like Torque Wrench, Spanners, Keys, grease guns etc. for operation and maintenance of the machine should be supplied. List of such tools should be submitted with offer   | Vendor to agree   |         |            |         |
|       | <b>11.0 SPARES:</b>  |                   |         |            |         |
| 11.1  | Item wised breakup of (1) standard-mechanical, hydraulic, electrical and electronic accessories & spares (included in Basic machine cost),(2) Essential -spares/accessories required for the Purpose and (3)Optional in sufficient quantity as per recommendation of Vendor for 5 years (After initial 24 month's Guarantee period)of trouble free operation on three shifts continuous running basis should be offered by vendor.If machine or control 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<br>The list to include following, in addition to other recommended spares: <b>(Unit Price of each item of spare should be offered in the price bid)</b> | Vendor to agree   |         |            |         |
|       | <b>a) Mechanical Pneumatic &amp; Hydraulic Spares:</b> All types of Pumps, Valves, Pressure Switches, Transducers, Flow Switches, Filters, Seals, O-rings, Hydraulic Hoses etc. If required.   | Vendor to confirm |         |            |         |
|       | <b>b) Electrical /Electronics:</b> All types of Relays, Contactors, Proximity Switches, Push Buttons, Indicating Lamps, Semiconductor Fuses, Special Fuses, Circuit Breakers, Main Power Switch, etc.  | Vendor to confirm |         |            |         |
| 11.2  | Vendor to supply 2 Sets of Electronic cards or PCBs or LCD Monitors, Modules or PLCs or Display Boards if used in the machine along with machine as essential spares.  | Vendor to confirm |         |            |         |
| 11.3  | Recommended set of standard & optional spares for all attachments are to be offered with details.  | Vendor to confirm |         |            |         |
| 11.4  | Vendor to confirm that complete list of spares for 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 machine  | Vendor to confirm |         |            |         |
| 11.6  | <b>DOCUMENTATION :</b><br>Three sets of following documents (Hard copies) in English language should be supplied along with the machine. Only originals shall be supplied. Photocopies will not be accepted.   | Vendor to confirm |         |            |         |
| 11.7  | Operating manuals of Machine   | Vendor to confirm |         |            |         |
| 11.8  | Programming Manuals of Machine   | Vendor to confirm |         |            |         |
| 11.9  | Detailed Maintenance manual of machine with all drawings of machine assemblies/sub-assemblies/parts including Electrical / Pneumatic/ Hydraulic circuit diagrams. All Assembly/ Sub Assembly Drawings including ladder drawing shall be supplied with the parts list.  | Vendor to confirm |         |            |         |
| 11.10 | Manufacturing drawings for all supplied Tables frame ,fixtures etc.  | Vendor to confirm |         |            |         |
| 11.11 | Catalogues, O&M Manuals of all bought out items including drawings, wherever applicable.   | Vendor to confirm |         |            |         |
| 11.12 | Detailed specification of all rubber items and hydraulic/lube fittings.  | Vendor to confirm |         |            |         |
| 11.13 | PLC program on CD,   | Vendor to confirm |         |            |         |
| 11.14 | Complete Master List of parts used in the machine shall be submitted by the vendor.  | Vendor to confirm |         |            |         |
| 11.15 | One additional set of all the above documentation on CD ROM, wherever possible.  | Vendor to confirm |         |            |         |
|       | <b>12.0 TRAINING</b>   |                   |         |            |         |
| 12.1  | BHEL Persons should be trained at supplier's Works for mutually agreed period in the area of<br>(a) Electrical, Electronic maintenance for machine & other supplied equipments<br>(b) Mechanical & Hydraulic maintenance of the machine & other supplied equipments<br>(c) Operation of the machine & other supplied equipments.   | Vendor to confirm |         |            |         |
| 12.2  | Fare, boarding & lodging for the trainees shall be borne by BHEL.  | Vendor to confirm |         |            |         |

| S No.  | Description - BHEL's Requirement  | Specified                       | Offered | Deviations | Remarks |
|--|---|---------------------------------|---------|------------|---------|
| 12.3   | Competent experts shall be arranged by the vendor during training for satisfactory & effective training of BHEL personnel.  | Vendor to confirm               |         |            |         |
| 12.4   | Vendor to quote for training on <i>per diem</i> basis   | Vendor to confirm               |         |            |         |
| <b>13.0 FOUNDATION :</b>                     |   |                                 |         |            |         |
| 13.1   | Vendor shall submit the layout drawing within one month from the date of Letter of Intent (LOI) / P.O. Layout should contain layout of the machine and load points including details viz. static / dynamic load details etc. The layout should consist of all requirements pertaining to complete machine including space requirement for Voltage Stabilizer, Isolation Transformer, Air compressor, Chip Bin & any other accessories. Foundation of the machine if required will be designed by supplier. BHEL shall construct complete foundation for the machine under supervision of supplier and at supplier's responsibility. supplier should arrange equipments required for the testing of foundation, if required . The vendor shall also indicate detailed specifications of grouting compound and Grouting procedure etc. for foundation bolts of the machine. | Vendor to agree                 |         |            |         |
| <b>14.0 ERECTION &amp; COMMISSIONING</b>     |   |                                 |         |            |         |
| 14.1   | Supplier to take full responsibility for carrying out the erection, start up, testing of machine, it's control & all types of other supplied equipment, machining of test pieces etc. Service requirement like power, air & water shall be provided by BHEL at only one point to be indicated by supplier in their foundation/layout drawings. Other requirements like crane and helping personnel shall also be provided by BHEL. Details of these requirements should be informed by vendor in advance.   | Vendor to agree                 |         |            |         |
| 14.2   | Successful working of full capacity of the machine by the supplier shall be considered as part of commissioning. All tests, as mentioned at <b>clause 15 &amp; 16</b> shall form part of the commissioning activity.  | Vendor to agree                 |         |            |         |
| 14.3   | Tools, Tackles, instruments and other necessary equipments required to carry out all above activities should be brought by the supplier.  | Vendor to agree                 |         |            |         |
| 14.4   | Commissioning spares, required for commissioning of the machine within stipulated time, shall be brought by the supplier on returnable basis.   | Vendor to agree                 |         |            |         |
| 14.5   | All Cover Plates required for the machine and its peripherals including pits, if any, shall be supplied and installed by the vendor.  | Vendor to agree                 |         |            |         |
| 14.6   | Portion, if any, of the machine, accessories and other supplied items where paint has rubbed off or peeled during transit or erection should be repainted and merged with the original surrounding paint by the vendor. For this purpose, the vendor should supply sufficient quantity of touch-up paint of various colours of paint used.  | Vendor to agree                 |         |            |         |
| 14.7   | Schedule of Erection and Commissioning shall be submitted with the offer.   | Vendor to agree                 |         |            |         |
| 14.8   | Charges if any ,duration, terms & conditions for E&C should be furnished in detail separately by vendor along with offer.   | Vendor to confirm               |         |            |         |
| <b>15.0 TESTING STANDARD &amp; PROCEDURE</b> |   |                                 |         |            |         |
| 15.1   | Welding Quality Test viz.Non Destructive Test( DP , X Ray,)etc  |                                 |         |            |         |
| 15.2   | Repeatability of settings   |                                 |         |            |         |
| 15.3   | a) Satisfactory welding should be demonstrated on minimum of three assemblies each for the smallest and the biggest sizes of the assemblies b) The sample welded joints should pass through the macro section test and satisfy the requirements of millivolt drop test where the difference between parent metal and weld metal value shall not exceed 10%.<br>c) Vendor should demonstrate the full penetration welding .  | Vendor to specify the Standard. |         |            |         |
| 15.4   | Any other testing if required   |                                 |         |            |         |
| 16.0   | <b>MACHINE ACCEPTANCE: (Tests/Activities should be Performed by Vendor)</b>   | Vendor to agree                 |         |            |         |
| 16.1   | <b>Tests/Activities should be carried out at supplier's works on the machine before dispatch :</b>  |                                 |         |            |         |
| 16.1.1                                       | The machine should be tested for full load test at supplier works before despatch.  | Vendor to confirm               |         |            |         |
| 16.1.2                                       | Demonstration of all features of the machine, control system & accessories.   | Vendor to confirm               |         |            |         |
| 16.1.3                                       | Any other tests/activities  | Vendor to confirm               |         |            |         |
| 16.2   | <b>Tests/Activities should be carried out at BHEL works while commissioning the machine :</b>   |                                 |         |            |         |
| 16.2.1                                       | Full load test to demonstrate the maximum power & capacity of the machine at BHEL works.  | Vendor to agree                 |         |            |         |
| 16.2.2                                       | Machine should qualify on actual job at min & max size  | Vendor to agree                 |         |            |         |
| 16.2.3                                       | Demonstration of all features of the machine, control system & accessories to the satisfaction of BHEL for efficient and effective use of the machine.  | Vendor to agree                 |         |            |         |
| 16.2.4                                       | Training of BHEL machine operators in operation of complete machine & accessories etc by the supplier's experts / engineers during their stay at BHEL works.  | Vendor to agree                 |         |            |         |

| S No.                                   | Description - BHEL's Requirement   | Specified          | Offered | Deviations | Remarks |
|---|--|--------------------|---------|------------|---------|
| 16.2.5                                  | Demonstration by actual use of all supplied attachments and accessories to their full capacity for actual jobs.  | Vendor to agree    |         |            |         |
| <b>17.0 PACKING:</b>                    |  |                    |         |            |         |
| 17.1                                    | Rigid packing for all items of complete machine with all Accessories and other supplied items to avoid any damage/loss in transit. When machine is despatched in containers, all small loose items shall be suitably packed in boxes.  | Vendor to confirm  |         |            |         |
| <b>18.0 GUARANTEE :</b>                 |  |                    |         |            |         |
| 18.1                                    | Guarantee for 24 months from the date of acceptance of the machine at BHEL works . During this Guarantee period at least 2 visits per year and/or whenever called by BHEL (within 24 hours of call) by the service engineer of the supplier to be made & the parts, items, spares etc. needing replacement to be replaced by the supplier free of cost. In support a Performance Bank Guarantee of 10% of Basic Value of P.O. valid for 24 months from the date of commissioning will have to be furnished by supplier | Vendor to confirm  |         |            |         |
| <b>19.0 GENERAL :</b>                   |  |                    |         |            |         |
| 19.1                                    | Machine Model  | Vendor to furnish  |         |            |         |
| 19.2                                    | Total connected load (KVA):  | Vendor to furnish  |         |            |         |
| 19.3                                    | Floor area required (Length, Width, Height) for complete machine & accessories   | Vendor to furnish  |         |            |         |
| 19.4                                    | Painting of Machine / Electrical Panels : RAL 6011 Apple Green (Polyurethane Paint)  | Vendor to confirm. |         |            |         |
| 19.5                                    | Total weight of the machine  | Vendor to furnish  |         |            |         |
| 19.6                                    | Weight of heaviest part of machine   | Vendor to furnish  |         |            |         |
| 19.7                                    | Weight of the heaviest assembly / sub-assembly of the Machine  | Vendor to furnish  |         |            |         |
| 19.8                                    | Dimensions of largest part/ sub-assembly/ assembly of the machine  | Vendor to furnish  |         |            |         |
| 19.9                                    | Detailed catalogues, sketch/photographs of the m/c and accessories/ attachments should be submitted with the offer.  | Vendor to submit   |         |            |         |
| 19.10                                   | Formula for calculating required time/speed of torch/job for welding Aluminium plates to be furnished by the vendor.   | Vendor to confirm. |         |            |         |
| 19.11                                   | Hydraulic, Pneumatic & oil pipings should be preferably metallic except places where flexible pipings are essential. All the pipes required for the same shall be included in the standard scope of the machine.   | Vendor to confirm. |         |            |         |
| <b>Signature &amp; Seal of Tenderor</b> |  |                    |         |            |         |

**Confirmations to key Commercial terms**

**SECTION 4**

|    |  |  |  |
|----|--|--|--|
| 1  | Bidder   |  |  |
| 2  | Contacting Person  |  | Required by our Reverse Auction agency also                          |
| 3  | Mobile No(s).  |  |  |
| 4  | Telephone No(s).   |  |  |
| 5  | email id(s)  |  |  |
| 6  | Place / Country of origin  |  |  |
| 7  | Whether quotation is in "INR"?   | YES / NO                                 |  |
| 8  | If not in INR, in which currency quoted?   |  |  |
| 9  | We agree for "Reverse Auction" (RA)  | YES / NO                                 | Not agreeing to these clauses will result in rejection of your offer |
| 10 | We agree to Guarantee terms "24 months from the date of acceptance of the machine at BHEL works"   | YES / NO                                 |  |
| 11 | We agree to submit PBG of 10% of PO Value  | YES / NO                                 |  |
| 12 | We agree to the standard payment terms as per NIT.   | YES / NO                                 |  |
| 13 | We have enclosed the <b>un-priced</b> Price Bid with our offer                                     | YES / NO                                 |  |
| 14 | Whether "Essential Spares" (ES) and "Optional Spares" (OS) have been mentioned and quoted thereof? | YES / NO                                 | "ES" will be part of Basic Machine                                   |
| 15 | Are there any "Options" of Basic Machine offered also?   | YES / NO                                 |  |
| 16 | If yes, are these "Options" included in Price Bid?   | YES / NO                                 |  |
| 17 | Rates of Spares have to be firm for a period of 2 years duration. Do you agree to it?              | YES / NO                                 |  |
| 18 | Whether the delivery terms are "Ex-Works" or "F.O.R. BHEL Rudrapur" including freight?             | - "Ex-Works"<br>- "F.O.R. BHEL Rudrapur" | This is required for the purpose of RA (to arrive at "landed cost")  |
| 19 | If "Ex-Works" will the consignment be Full Truck Load (FTL) or Part Load                           | FTL / PL                                 |  |
| 20 | If "FTL" what would be the size and no. of trucks required?  | Size: _____<br>No. of Trucks: _____      |  |
| 21 | Is there Erection & Commissioning (E&C) portion also?  |  |  |
| 22 | Is the E&C charges clearly spelt out in "Price Bid"  | YES / NO                                 | If not, E&C and ST on that shall be treated as INCLUSIVE             |
| 23 | Whether Service Tax applicable E&C charges also?   |  |  |
| 24 | What is the delivery schedule for "Supply Portion"?  | _____ weeks                              |  |
| 25 | What is the time required for E&C  | _____ weeks                              |  |
| 26 | What is the validity of your quotation?  |  |  |
| 27 | Is Pre Delivery Inspection to be done at your works?   | YES / NO                                 |  |
| 28 | Do you agree to provide training to our staff as per "Training" clause?                            | YES / NO                                 |  |
| 29 | Are there any Training charges? Quoted in Price Bid?   | YES / NO                                 |  |
| 30 | Are there any other charges mentioned elsewhere in the offer which are not in the Price Bid?       | YES / NO                                 | If not in Price Bid, will not be payable                             |
| 31 | If yes, include these charges in the Price Bid?  |  |  |

Confirmations here supersede those mentioned in the techno-commercial offer.

**(Signature & Stamp of Bidder)**