

**Government of India**  
**BHABHA ATOMIC RESEARCH CENTRE**  
**Waste Management Division**  
**Waste Management facilities, Trombay**

Ref. No. WMD/Mech/SHS/Rectifier/2019/

May 14, 2019.

**Sub : Tender Inquiry for Minor Fabrication Work**

Sealed quotations are invited by for and on behalf of President of India by Chief Suptd. WMD, BARC, Trombay, Mumbai from the approved and eligible contractors having adequate experience in works of similar nature with the units of DAE, NPCIL or public undertakings.

**Description of Work :** *Repair of arc welding rectifier machines including breakdown maintenance, complete overhauling by supply & replacement of requisite spare parts followed by performance testing at WIP, Trombay as per specifications enclosed.*

The quotations shall be received on or before **24/05/2019** upto **1300 Hrs.** The sealed quotations shall be opened on the same day at **1400 Hrs.** in the office of the authorised tender opening officer, WMD, BARC, Trombay.

Tenderers' may contact telephonically on 25591101/25591020 or by email [shiroles@barc.gov.in](mailto:shiroles@barc.gov.in) for further details of the work and site visit, if required. Details of similar works carried out earlier may be submitted.

**Terms and conditions :**

1. Quotation should be submitted on printed letter head indicating GST & Service Tax registration no., PAN no. of the firm. The supplier/contractor shall submit undertaking certifying that the items are not exempted from GST, the GST claimed is actually paid & assessed and further no claim is pending for refund or is admissible. Undertaking to this effect shall be submitted along with bill (Format shall be given).
2. Sealed envelope should clearly indicate Name of Work, Ref. No. & Due Date of submission of quotation. Address on the envelop should read :  
Suptd. (Mech),  
Waste Management Facilities, Waste Management Division,  
BHABHA ATOMIC RESEARCH CENTRE,  
Trombay, Mumbai 400 085.  
(Kind attention : S H Shirole, SA/G)
3. Sealed quotations should be submitted only through *registered post / speed post* through *Indian Postal services.*

4. Your offer shall be valid for a minimum period of 30 days from the date of opening and the quoted prices shall remain firm during the period of execution of the order.
5. Taxes, duties, levies, other charges etc. if any, shall be clearly mentioned.
6. Work shall be completed within 30 days issue of work order.
7. Payment shall be made within 15 days after successful completion of the work. It may be noted that income tax @ 2 % and surcharge on income tax as applicable and educational cess on income tax and surcharge as applicable shall be deducted from your bill.
8. The contractor & working personnel shall have valid PVC for working inside BARC premises and shall have adequate infrastructure / facilities to carry out the respective work.
9. The contractor shall be registered under EPF act. It is mandatory to submit receipts towards EPF payments by the contractor along with bill/documentary proof for release of payment.
10. The work shall be covered by guarantee for one year from the date of completion of work.
11. The suppliers/contractors are advised to get complete details of work before quoting the offer and may request for site visit, if required.
12. Suptd(M), WMF-Trombay reserves the right to accept / reject any or all the quotations without assigning any reason.

*(S.H. Shirole)*

SA – G

Encl: Annexure to technical requirement of work

**Annexure to technical requirements for repair of arc welding rectifier machines including breakdown maintenance, complete overhauling by supply & replacement of requisite spare parts followed by performance testing at WIP, Trombay as per specifications.**

**1. Scope of work :**

The scope of work includes break down maintenance of MEMCO make arc welding rectifier machines installed at WIP fabrication shop, including supply & replacement of requisite spares, by deploying service mechanics for the work at WIP, Trombay meeting all specification as given herein under.

**2. Applicable machines covered by AMC :**

MEMCO make arc welding machines - 05 nos.

**3. Nature of work :**

The arc welding machines installed at WIP machine shop are operational since long and delivered successfully with continuous fabrication activities including SMAW, TIG welding as well as plasma cutting for carbon steels and stainless steel materials. All the machines are facing breakdown problems due to internal circuitry faults, connector failures due to long term wear and the machines are overdue for breakdown attendance as well as complete overhauling, involving replacement of spares. List of spares to be replaced is given below. The work involves complete repair & breakdown maintenance of the welding machines by checking, fault finding, dismantling, overhauling of parts and replacement of worn out parts including electronic circuit cards, strengthening of soldered joints, cabling replacements etc. followed by assembly and performance testing of the machines.

**4. Breakdown maintenance & overhauling :**

Following actions may be included in the breakdown maintenance activities besides standard procedure for each machine.

- a. Complete check & inspect the machine.
- b. Check for working of wiring & all meters, current regulators, connectors, switches etc.
- c. Check for continuity of supply, panel circuit boards, meters, electrode holders etc.
- d. Repair of faults including replacement of spares.
- e. Box wiring, panel wiring & soldering of spares for proper installation of connectors.
- f. Overhauling of complete machine including cleaning & performance check.
- g. Replacement of plasma torch & electrode holders including supply of additional holder for each machine.
- h. Check for rated output.
- i. Trial of the machine for proper functioning with current variations.
- j. Trial with test job for welding thereby loading the machine to full capacity.

**5. List of spares :**

- a. On Off switch 60 amps (01 no.)
- b. Indicator lamps (04 nos.)
- c. Open type regulator (01 no.)
- d. MR 106A 400 Amps meter (01 no.)
- e. MR 106A 600 Amps meter (01 no.)
- f. MR 106A 600 volts meter (01 no.)
- g. PCB card 118D (02 nos.)

- h. PCB card 116E (01 no.)
- i. PCB card 231 (02 nos.)
- j. Micro switch with wire (01 no.)
- k. Plug pin with wire (01 no.)
- l. Electrode holder 400 Amps (8 nos.)
- m. Plasma cutting torch assembly set(water cooled type)(1 no.)

All the spares shall be of MEMCO / reputed make, suitable for the model of the machine and as approved by Engineer in charge. The spares shall be covered by standard guarantee of trouble free operation with replacement clause.

#### 6. **Check list :**

After complete repair and maintenance, following check list shall be prepared and submitted.

Check the rectifier for proper assembly of all parts.

Check for proper installation of spares & wiring involved.

Check all electrical connections & meters.

Check start & stop of machine.

Check for electric supply at holder end and its' rating.

Check for arc striking followed by continuous arc welding for different rated current ratings.

Check the electrode holder for GTAW use.

Check for overheating of torch & its' cooling.

Check for welding operations.

#### 7. **General requirements :**

- i. All the work related to the machine repair shall be carried out with standard maintenance procedure for the specific machine at the workshop where machine is in installed position.
- ii. The maintenance schedule shall be decided in advance such that minimum downtime shall be affected.
- iii. The contractor shall depute maintenance personnel/technician having sound knowledge for the work involved. Total 2 to 4 personnel/technicians shall be deputed for the work on each day. The contractor should also nominate one group leader among all workmen for administrative and supervisory control of his workforce. Departmental supervisor shall be coordinating with this work force.
- iv. Supply of spare parts as required for replacement for the above work is within the scope of the supplier. Original spare parts for the machine shall only be used and shall be of reputed make. The spares shall be covered by standard guarantee for intended use. The spares shall be checked by Engineer in charge or his representative at fabrication shop before installation.
- v. Work shall be completed within 30 days of issue of work order.
- vi. The contractor shall arrange for the tools, tackles, equipments & machineries required for the job. Only water & electricity shall be provided. Machines requiring electrical connections shall be provided with electrical supply within the permissible rules & formalities, which shall be strictly adhered to by the contractor. Operational safety of these equipments as well as the operators shall be contractor's responsibility.
- vii. The contractor shall be responsible for safe working procedures as well as use of safety gadgets required during working.
- viii. The contractor personnel shall have police verification clearance for entry inside BARC premises and shall also strictly adhere to security norms & procedures of the department. Contractor or his personnel shall follow all the security instructions for acquiring the entry pass and all the stipulated documents shall be submitted to security for this purpose.

- ix. Workmen's insurance shall be responsibility of the contractor. Valid documentary proof towards insurance of workmen for the complete period of the work order shall be submitted. All the safety gears required for his staff shall be provided by the contractors as instructed by departmental supervisor.
- x. Injury; if any; to contractor's personnel shall be responsibility of the contractor and not of the department. The contractor shall bear all the medical expenses in such scenario. Only first aid help shall be provided at site as possible.
- xi. Any damage to government property like nearby equipments etc. and any mishap/accident to the working personnel shall be solely contractor's responsibility. Loss of government shall be recovered from the contractor.
- xii. Each photo passes issued to the contractor or his personnel shall be surrendered to the issuing authority on completion of work and 'No Demand Certificate' to that effect shall be obtained for submission to the indenting officer.

sd/xx

(S Wadhwa)  
Suptd (M),, WMFT

Sd/xx

(S H Shirole)  
SA/G