

Vashi Complex, Navi Mumbai - 400 703 Tel : 2788 7169 TeleFax: 2784 0032

## Government of India Bhabha Atomic Research Centre **POWDER METALLURGY DIVISION**

**Tender Enquiry** 

## Ref.: PMD/Tender Inv/2022/ 1014

Date: 24/10/2022

# Sub : "Breakdown Repair of Vacuum Hot Press in PMD" Vashi.

For & On behalf of the President of India, quotations are invited by undersigned for the above said work to be carried out at Powder Metallurgy Division, Vashi Complex Navi Mumbai 400703. The scope of work is detailed below.

"Breakdown Repair of Vacuum Hot Press in PMD, Vashi". as per attached annexure

The quotation in sealed cover super scribed as **"Breakdown Repair of Vacuum Hot Press in PMD"** and addressed to the following officials should reach him by speed post/Registered Post through Indian Postal Service on or before the date and time mentioned below

Shri. N. E. Mawal SO/E, Powder Metallurgy Division BARC, Vashi Complex, Navi Mumbai-400073

On or before 15/11/2022 up to 17:00Hrs

The party should write in words as well as figures, the rate(s) quoted by him. All corrections must be attested by the dated initials of the tenderer may note that in case the work is awarded to him, he has to produce police verification certificate for the employees to be deputed for fabrication and erection work inside the BARC/BRIT complex, Navi Mumbai.

# The quotation should be sent only by speed post or registered post of Indian Postal Department.

Time allowed for completion of work is 30 days. The same shall be reckoned from the date of issue of work order. The acceptance of tender rests upon the undersigned with a right to reject tender in part or full without assigning any reason.

Thanking You

SO/E. PMD

## Breakdown maintenance of Vacuum Hot Press Unit

#### 1. Repair of cooling water line:-

- Cooling water system pipe line is broken from the induction panel due to rusting of the connector.
- Dismantling of 2 inch return cooling water pipe line from the panel. 1 inch male threaded and 2 inch female threaded reducer has to be replaced by new one.
- Pipe of 12 inch male threaded at both ends to be removed from old pipe line along with bend and it shall be fixed with reducer. Broken pipe along with valve to be fixed with cooling water system.

#### 2. Repair of induction coil:-

- 450 mm dia, 4 turns of 1 inch copper induction coil is leaking and its insulation is damaged.
- Coil has to be taken out from vacuum chamber by removing water cooled lids after draining the water from the coil.
- All the insulation of glass tape and insulation tape to be removed from coil by burning using blow lamp.
- By applying pressure of 100 psi leak is to be identified and rectified by copper brazing.
- Repaired coil to be tested for leak detection before applying glass wool and insulation tape winding.
- After certification the leakage coil to be buffed and three coats of glass wool and one coat of insulation tape to be applied by winding. In each winding round half of the tape has to be covered by second winding round.
- After winding three coats of araldite to be applied after drying of previous coat. After drying of last coat coil shall be fixed in the chamber and connected to water cooled lids.

#### 3. Hydraulic press break down maintenance:-

- Hydraulic press connected to the VHP is not functioning.
- When pressure is applied to the top RAM it shows movement but not holding the pressure on the job. Its movement is getting reversed when pressure is applied from bottom RAM.
- Top RAM is moving in opposite direction (going reverse).

#### 4. Repair and Servicing of Solenoid Valves:-

- Vacuum pumps are not able to generate vacuum in the chamber.
- In this system solenoid valves are not operating. Valves to be inspected for its functioning.
- Valves to be dismantled from system and necessary repairing to be carried out.
- Party shall dismantle the system performance by carrying out three runs on the given parameters such as vacuum, temperature etc..
- All 'O' rings, oil seals and ferrules of PU pipe to be replaced.

#### 5. Terms and conditions for the party:-

- After repairing of the system party shall provide six months warranty for any malfunctioning of the system. If it arises, it has to be carried out without any charges.
- Party has to visit and site diagnosis of the problem. After diagnosis party shall provide quotation based on the problem including visiting charges.
- Party shall provide documentary evidences showing that they have performed similar of maintenance job in working plants.
- Without any documentary evidence site visit the quotations will be consider invalid.

### 2. Other Terms and conditions

- Party should have experience in above mentioned type of similar work and should show previously completed work orders on demand.
- Party shall arrange all equipment and personnel required for the successful completion of the work. Contractor shall stick to the schedule given and complete the work before work order expiry. No extension will be given.
- The contractor has to carry out the job maintaining all the safety norms. The contractor has to provide safety helmet and safety goggles to staff employed for execution of the work at site.
- Party should do the needful things, which may not be specifically mentioned in above, but necessary for the completeness of work, without any additional cost.
- Work shall be carried out during working hours i.e. 10:00 hrs. to 16:00hrs. Monday to Friday. Prior permission will be required to work in holidays and beyond office hours on working days and holidays.
- The work involves working in restricted area with security restrictions on entry of workers, working time etc.
- Please note tools entry to the site & their exits is subjected to security check.

# 3. Site visit

- It is mandatory to visit the site to comprehend the scope of work and site conditions with prior intimation, before submission of the offer. The site can be visited on working days between 10.00 Hrs to 15.00 Hrs. however, for site visit prior intimation of at least three working days is necessary for arranging the entry permits. For preparing entry permit, the supplier can contact undersigned on phone no. 022 27887661 or mail to <u>ksnaik@barc.gov.in</u> OR 022-27887169 <u>nemawal@barc.gov.in</u> giving complete details. Viz. name of firm, name of visitor, occupation/designation, identity proof, PVC details, Probable date of visit etc. Offer submitted by the vendor/contractor who have not visited site shall be considered invalid.
- In case of any technical doubts, supplier shall contact the undersigned for clarifications.

# 5. Warranty

six months from the date of work competition.

# 6. Completion Period

• The job is to be completed within **60 days** from the date of receipt of the order any delay which is liable to the contractor is liable for penalty @ 0.5% per week (5% maximum) to be imposed on the contractor.

# 8. <u>Safety</u>

- Party should follow all the safety procedure while working inside BARC Vashi complex. During the execution of the work order party will be responsible for all safety precautions to be maintained in the work area. The party should arrange all the safety appliances.
- All the personnel of the contractor should take care of safety and follow the industrial safety regulation while working at site. Specific personnel protective equipment (PPE) required for the job will be provided by BARC as and when required. Any mishap occurring on the job due to unsafe work practice shall be vendor's liability.

Srikanth Kethavath Scientific Assistant(C)

25/10/2022 (N.E.Mawal) Scientific Officer (E)