श्री चित्रा तिरुनाल आयुर्विज्ञान एवं प्रौद्योगिकी संस्थान, जैवचिकित्सकीय प्रौद्योगिकी स्कंध SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY BIO MEDICAL TECHNOLOGY WING

(एक राष्ट्रीय महत्व का संस्थान, विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार)
(An Institution of National Importance, Dept. of Science and Technology, Govt. of India)
पूजप्पुरा, तिरुवनंतपुरम - 695012, केरल,भारत | Poojappura, Thiruvananthapuram - 695012,
Kerala, India

टेलीफॉन नं / Telephone No: 0471-2340801 / 2520450, फैक्स / Fax: 0471-2341814 वेबसाइट / Website: www.sctimst.ac.in / Email: bmtstp@sctimst.ac.in

TENDER NO: BMT/STO/PRF/2023-24/IND4/02

Dated 30/12/2023

TENDER NOTICE

Sealed/Email quotations are invited from the service providers for the Maintenance & service (Labour AMC) of AGIE Charmilles Robofill 240 SL wire cut EDM machine and AGIE Charmilles Roboform 23 EDM Machine. Detailed technical requirements with terms and conditions are mentioned below.

Scope of work

- 1. Preventive maintenance & servicing under annual maintenance contract for AGIE Charmilles Robofill 240 SL Wire Cut EDM Machine. **Machine Number: 925385**, **Generator No: 3206200162**.
- 2. Preventive maintenance & servicing under annual maintenance contract for AGIE Charmilles Roboform 23 EDM Machine. **Machine Number: 580092.**

The vendor should provide a Non-comprehensive AMC for a period of 3 years. The AMC services should cover repair and maintenance of the machine under the contract. The AMC should take care of preventive maintenance and also the unlimited breakdown maintenance of the machine during the contract. The preventive Maintenance should be provided minimum 4 visits per machine in a year at quarterly interval. The breakdown maintenance should be attended as and when required, throughout the contract period, on intimation regarding the breakdown problem is reported to the service provider. The response time to attend the breakdown problem should not be more than 3 working days.

Preventive Maintenance Checks for Robofrom 23 EDM machine

1. Visual Check of External Aspect:- Screen of Monitor, Keyboard kesy, USB port, Switches and Floppy disk. General aspect of the machine, Injection/Suction

- controls functioning, Door seal and Door closing. X,Y Axis bellows. If any defect is noticed the same to be attended
- **2.** Visual Check of Cabinet interiors Check the electrical cabinet and the fan and filter in the cabinet.
- **3.** Voltage of all PCB's. Check the condition of battery.
- 4. Visual check of interior of Generator CNC:- CNC rack, dust, APMT rack, power racks and checking of cables, Optical fibers etc. If any defect is noticed the same to be attended.
- **5.** Visual check and functioning of X,Y,Z,C motors, drive belts, lubrication on the axes. And check the axis
- **6.** Air filters and Oil filters checking for any blockage and necessary cleaning of the filter. Circulation pump checking, Hydraulic-keses-ehecking for leakage/degradation.
- 7. Check of Software functions: Intialize the machine, checking the PREP, EXE mode. GRAF mode.
- 8. Check all the safety switch functioning.
- 9. Resin quality checking and filling it with new resin.
- **10.** CNC and peripheral functionalities check for perfect production.
- 11. Check the machine pneumatic circuit, drain it and change filters if needed.
- **12.** Check the oil level in the centralized lubrication system and top up the oil, if needed.
- **13.** Check the generator and the connection of the boards and terminals in the generator.
- **14.** Check Die electric tank, Suction, lateral and chuck flushing. Check functioning of the pump.
- 15. Check all the floats.
- **16.** Check all the axes are moving freely. Check the axis scales. Perform a machine greasing.
- 17. Check the axes ball screw and the rail state.
- **18.** Check temperature dielectric sensors.
- 19. Carry out trial sparking

Preventive Maintenance Checks for Robofill 240SL wire EDM machine

- 1. Visual check of the machine status.
- 2. Check all the battery voltages.
- Check the general lubrication condition. Check the water level functioning of the float.

- 4. Check all the pumps (high pressure pump, circulation pump, low pressure pump) and its functions.
- 5. Check connections of all the motors and the condition of the belt. Check the movement of all the axis.
- 6. Check the threading, wire cutting and re-threading functions and the wire cutting
- 7. Carry out the Guide set up, wire calibration, brake calibration and Greasing cycle.
- 8. Check the dielectric filters and the filtration circuit.
- 9. Check the functioning of all the valves.
- 10. Check the hydraulic hoses, and if any hose is de-graded the same to be replaced.
- 11. Check the CNC rack, power rack (UPR,RUPA,UPA) conditions of the rack.
- 12. APMT rack and optical fibers and the general aspects of generator cabinet.
- 13. Check the contact wetting.
- 14. Check high pressure upper and lower injections, upper and lower injection chambers.
- 15. Servicing of lower and upper head.
- 16. Check the wire preparation panel for the functioning of wire feed, wire drive pulleys, wire drive belts, rocker arm and annealing tube and the general aspect of the panel.
- 17. Check the software functions.
- 18. Check the resin condition and if required the resin to be filled.
- 19. Carryout the trial cutting and check the wire feed movement and the flushing of the chopped wire to the bin.

TERMS AND CONDITONS

1. Period

The period is for 3 years at a stretch. The renewal after the completion of 3 years with 5% escalation will only be done on receipt of satisfactory service report and recommendation for the same from Head of Department concerned and the Head, BMT Wing.

2. Taxes and Duties

Tax if any applicable will be paid extra as per rules. TDS at appropriate rate shall be made from the service charges, if applicable.

3. Performance security

A bank guarantee or security deposit (in the form of account payee demand draft or fixed deposit receipt from a commercial bank) should be submitted as performance security by the Service provider to the SCTIMST. The bank guarantee should be from a nationalised bank of India in a format approved by the Institute and should have validity till 3 months after the expiry of the contract period. The amount of the performance security should be 2.5% of the AMC value of equipment to be maintained.

4. Payment

Payment would be released on satisfactory completion of service as per the scheduled visit during the period of AMC, on Quarterly/Yearly/Half Yearly/Advance.

If sufficient Bank Guarantee is produced, six months contract amount would be released as advance in a year.

The release of payment with or without Bank Guarantee is subject to the satisfactory report from the user department and Head, BMT wing.

In case advance amount is paid to the service provider and if it is found that the performance of the service provider was not satisfactory, as appreciated by the Institute authorities, the service provider will be asked to repay the advance amount with interest. In case bank guarantee is submitted the amount will be recovered as per the provisions of Bank Guarantee.

5. Preventive Maintenance

The service provider should ensure the preventive maintenance of equipments. The representative of the service provider should visit the Institute <u>once in 3 months</u> in an year for preventive maintenance which will include cleaning, carrying out necessary repairs, checking of general-performance of the equipments and <u>must attend any number of breakdown calls reported to them without charging any additional fee</u>. Schedule of visit to be fixed jointly by the service provider and the concerned HOD/SIC-PRF

6. Place

The place of maintenance of the equipments will be the installation site at BMT Wing SCTIMST. In the event of any major breakdown, and if repairs cannot be done at the Institute, the defects can be rectified at any service centre as the service provider may think proper after approval of the Head, BMT Wing on recommendation of HOD.

But dismantling, packing forwarding, transportation and insurance charges etc if any, would be borne by the service provider. Gate pass for temporary removal of equipments/spares shall be obtained from the Institute.

7. Termination of Contract

The institute reserves the right to terminate the contract on unsatisfactory performance of the contractor during the period of contract by giving one month notice in writing without any financial commitment. The service provider will not be entitled to claim any compensation against such termination. However, the service provider shall continue to render satisfactory service for the balance period till alternate arrangement is made by the institute. While terminating the contract, if any payment is due to the contractor for maintenance services already performed in terms of the contract, these would be paid as per the contract terms.

8. Scope

The equipments covered under this contract shall be repaired and rectified on site during the office hours of the institute (9.00 AM to 05.00PM on all working days) as and when the same is reported to be out of order. (Emergency-out of office hours). The cost of genuine/Original spares required for maintenance shall be borne by the <u>Institute/Service provider</u> as mutually agreed.

The service engineer of the Service provider should report to Purchase & Stores Division and collect work permit from the concerned engineer in charge of the equipment before commencement of the work. After completion of the work the service engineer should get the comments regarding the service and signature from the user on the backside of the work permit. The service engineer shall submit the service report and the work permit of the work done during each visit to the concerned Department and record the same in a logbook.

Replacement of any spare part will be done by service provider in consultation with concerned <u>Scientist / Engineer</u>. It shall be the responsibility of the Service provider to provide authorized price list of spare parts of the equipment covered under the Annual Maintenance Contract from his Principals. Any item need replacements which are not mentioned in the price list, Service provider shall provide them free of cost. Whenever replacements of spares are arranged the same shall be done only after entering the same in the store register. Details of the defective parts removed shall also be entered in the store register.

9. Down time and Penalty

In case the breakdown is not attended to within 3 days of intimation, penalty at the rate of 0.5% of the annual maintenance contract charge per day shall be recovered from

the service provider. Service provider shall ensure rectification of defect of equipment within a reasonable period.

In case the equipment is not repaired, then the institute may choose to get the same repaired by any other agency and the expenditure incurred therein shall be recoverable from the service provider from the subsequent payments or else from the performance security if all the payments have been released.

10. Limitation of liability

The limitation of liability on any default of Service provider will not be more than the AMC charges specified under this agreement.

11. Dispute Resolution.

In the event of breach of any condition in this contract, the matter would be resolved jointly by Head BMT Wing/Heads of Departments/Stores & Purchase Division/FA of the Institute and representative of the Service provider.

12. Assignment

The Service provider will not assign the job or part of the contract to any other firm without the consent of the Institute in writing.

13. Breakdown Notice to Service provider

The breakdown details would be reported to the Service Engineer/ office of the Service provider by the Scientist/Engineer/Stores & Purchase Officer through the fastest mode of communication (by phone) which shall be confirmed in writing (By Fax/email/Registered letter). The Service provider shall ensure that the breakdown to be attended immediately after the receipt of the breakdown report.

14. Service Report

Service report for each visit (Routine as well as breakdown services) duly certified by the HOD concerned/Nominee of HOD must be submitted to the Purchase Division along with the work permit issued from Purchase and Stores Division after attending the work.

Name of the Department/Division/Section, Equipment Name, Equipment Code/Tag No., Nature of service (PM/BM), date of service (PM/BM) should be clearly mentioned in the Service Report.

15. Fall Clause

.

The maintenance charges shall in no event exceed the lowest charges at which Service provider service machines of identical description to any other party during the period of this contract. If at any time, during the said period, service provider reduces the service charges of such machines to any other customers, it shall be forthwith notified to institute and the charges payable under the contract for the servicing done after the date of coming into force of such reduction of servicing charges shall stand correspondingly reduced.

16. General

- 1. The facilities meant for SCTIMST personnel (Transport, Canteen etc.) shall not extend to Service provider service personnel.
- 2. In the event of any damage to our property or personal injury to Institute/Service provider personnel due to the negligence of Service provider employees, the responsibility shall solely rest with Service provider.
- 3. Institute will not be responsible for any loss or life of Service provider Service Personnel while performing the contract at institute premises due to natural calamities / accidents / explosion etc.
- 4. No travel expenses shall be borne by the Institute in respect of the travel undertaken by the Service provider towards fulfillment of obligations under this contract.
- 5. Institute shall, under no circumstances be deemed or treated as the employer in respect of any person employed by or through Service provider-for any purpose whatsoever nor would Institute be liable for any claim whatsoever of any such person.

17. Contact details

Service provider should submit the address with phone No. fax No., e-mail ID of the local service person along with the agreement. In case of change of address, the same should be informed to the institute in writing.

18. Force Majeure

Neither party shall be default under by reason of its failure or delay in the performance of its objectives, if such failure or delay is caused by acts of God, Government laws and regulations, fire, explosion, accident or any other cause beyond its control and without its fault or negligence.

19. System Availability:

In the event of any dispute as to whether the system downtime is due to damage caused by mishandling or system malfunction, the issue will be referred to the Director,

SCTIMST through Head BMT wing for decision. The decision of the Director, SCTIMST will be final and binding upon both the parties.

GENERAL TERMS & CONDITIONS

- 1. All payments will be through cheque/online within 30days of receipt of detailed bill after satisfactory execution of work and approval of HOD/SIC-PRF.
- 2. All the payments by the Institute will be made only at Thiruvananthapurm.
- 3. Penalty clauses are also applicable as per Institute's rules.
- **4.** Only courts in Thiruvananthapuram shall have the jurisdiction to treat the disputes after the award of contract.
- **5.** Works should be carried out in coordination with concerned departments of the Institute.
- 6. Deadline for submission of tender is up to 15.01/2024 at 5.00 pre
- 7. Filled quotation in sealed cover should be sent/handed over to Administration Department, BMT Wing of the Institute at Poojappura before deadline of submission.

In case of any further for submission of tenders, you may contact Purchase & Stores Division, BMT Wing (Ph: 0471-2520438/328/457/228) before closing date of tender.

Last date of receipt of tender either through post/by hand or email is

HEAD-BMT WING