



भारतीय परमाणु अनुसंधान केंद्र  
BHABHA ATOMIC RESEARCH CENTRE

## TENDER ENQUIRY

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GOVERNMENT OF INDIA  
BHABHA ATOMIC RESEARCH CENTRE  
URANIUM EXTRACTION DIVISION

Ref: UED/PI.13/23/४१११

Dated: 14-02-2023

M/S. \_\_\_\_\_  
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TENDER Ref No: BARC/UED/SM/22076 dated: 14-02-2023

DUE DATE: 27-02-2023 at 15:00 Hrs.

**Subject:** Repairing, servicing, testing and maintaining of different Radiochemical Process plant Equipment / systems and miscellaneous associated work / jobs at UED, MG, BARC, Trombay, Mumbai site. (Job is site specific)

Dear Sir/Madam,

Sealed Quotations are invited on behalf of President of India by through Head, Uranium Extraction Division (UED), BARC for Repairing, servicing, testing and maintaining of different Radiochemical Process plant Equipment / systems and miscellaneous associated work / jobs at UED, MG, BARC, Trombay, Mumbai through India Post on or before due date as per the following tender technical Specifications/terms.

1) **Vendor/Contractor's scope of work:**

Repairing, servicing, testing and maintaining of different Radiochemical Process plant Equipment / systems and miscellaneous associated work / jobs at UED, BARC plant site as per the following Technical detail/requirements-

- i. Repairing and overhaul maintenance/servicing of process pump (**centrifugal type**) assemblies used for feeding/transferring of Radiochemical fluid substances to the different plant process equipment.

**Quantity: Total 10 nos. (Centrifugal pump)**

Description	Pump-1 (6 Nos.)	Pump- <del>2</del> (2 Nos.)	Pump- <del>3</del> (2 Nos.)
Type	Centrifugal pumps	Centrifugal pumps	Centrifugal pumps
MOC	SS 304 L	SS 304 L	SS 304 L
Capacity in M <sup>3</sup> /Hr	2.0	3.0	5.0
Head in mtr.	35	10	50
Suction	Flooded	Flooded	Flooded
End connection	Flanged (40 x 25 mm)	Flanged(50x40mm)	Flanged (40 x 25 mm)
Power (HP)	0.75 hp, 2900 rpm	1.0 hp, 2950 rpm	10 hp, 2900 rpm
Shaft Sealing	PTFE Gland packing	Mechanical Seal	PTFE Gland packing

Complete Dismantling of the pump assemblies from the site, washing/cleaning, decontamination assessment of fault, fault rectification, checking the condition of packing/sealing, impeller, suction strainer, Impeller casing, coupler and spider unit, Pump's sound/vibration, replacement of the faulty part (if any), complete servicing, Lubrication/greasing of the moving parts, functionality testing of complete assemblies and fitted back to the process site, system box up, necessary cleaning/housekeeping of the working site, performance check of the serviced machinery/equipment during Normal process operation and as per the site requirement.

- ii. Repairing and overhaul maintenance/servicing of process pump (**Progressing Cavity Pump /Metering type**) assemblies used for feeding/transferring of Radiochemical fluid substances to the different plant process equipment.

**Quantity: Total 02 nos. (Progressing Cavity Pump)**

Type: Screw type.

Purpose & MOC; Dosing pump, SS304 L

Flow rate: 1.0 m<sup>3</sup>/hr at 2.0 bar

Suction: flooded

Seal type: Gland packing

Packing material: PTFE

End connection: Flanged

Suction Flanged: 50 NB

Discharge Flanged: 50 NB

Flow rate adjustment: By adjusting stroke length

Motor: 0.75 KW, 273 rpm FLP

Complete Dismantling of the metering pump unit from the site. washing/cleaning, decontamination, assessment of fault, fault rectification, checking the condition of packing/sealing, plunger, coupler, safety valve and spider unit, replacement of the faulty part (if any), complete servicing, Lubrication/oiling/greasing of the moving parts, functionality testing of complete assemblies and fitted back to the process site, system box up, necessary cleaning/housekeeping of the working site, performance check of the serviced machinery/equipment during Normal process operation and as per the site requirement

- iii. Repairing and complete servicing of flanged 3-piece design **SS ball valves** associated with different plant equipment, pump & pipelines at the plant site-

**Quantity: Total 20 nos. (Size: 50 NB)**

Type: Ball valves  
Design: 3 piece  
End connection: flanged  
MOC: SS304L  
Size: 50 NB  
Flange: raised face  
Pressure rating: ASME 150 Class

Flange rating/Dimension: ANSI 150 CLASS, raised face (RF),  
Flange Dimension, thickness and drilling as per ANSI B 16.5  
Gland packing/Body seal/connector seal/seat etc. : PTFE

**Quantity: Total 08 nos. (Size: 40 NB)**

Type: Ball valves  
Design: 3 piece  
End connection: flanged  
MOC: SS304L  
Size: 40 NB  
Flange: raised face  
Pressure rating: ASME 150 Class

Flange rating/Dimension: ANSI 150 CLASS, raised face (RF),  
Flange Dimension, thickness and drilling as per ANSI B 16.5  
Gland packing/Body seal/connector seal/seat etc.: PTFE

**Quantity: Total 25 nos. (Size: 25 NB)**

Type: Ball valves  
Design: 3 piece  
End connection: flanged  
MOC: SS304L  
Size: 40 NB  
Flange: raised face  
Pressure rating: ASME 150 Class

Flange rating/Dimension: ANSI 150 CLASS, raised face (RF),  
Flange Dimension, thickness and drilling as per ANSI B 16.5  
Gland packing/Body seal/connector seal/seat etc.: PTFE

Complete Dismantling/removing of the all the valve assemblies as mentioned above from the process line/equipment at the site as per the process schedule/requirement. Washing/cleaning, assessment of fault, fault rectification, checking the condition of packing/sealing, MOC deformation, operationality, valve passing/leakage, replacement of the faulty part (if any), complete servicing, Lubrication/oiling/greasing of the moving parts, testing (Hydro & Pneumatic testing **as per EN 12266-1/API 598**) of valve assemblies and fitted back to the process site, system box up, necessary cleaning/housekeeping of the working site, Functionality testing/ performance check of the serviced valve during Normal process operation and as per the site requirement.

- iv. Repairing and overhaul maintenance/servicing of **RVDF assemblies** used for filtering of Radiochemical fluid substances to the plant process equipment.

**Quantity: Total 01 no. (RVDF system)**

Type- Rotary  
MOC- SS 304 L  
Drum Size - 1.0 m dia.  
Filter Cloth – 1000 mm wide X 3000 mm long  
Filter Cloth material- PP  
Motor hp.- 0.75 kw, 1415 RPM

Complete Dismantling of the filter assemblies from the site, washing/cleaning, decontamination assessment of fault, fault rectification, checking the condition of filter media, gear box, suction & discharge pipe, Crank type lever system, hopper unit. Rvdf sound/vibration, replacement of the faulty part (if any), complete servicing, Lubrication/greasing of the moving parts, functionality testing of complete assemblies and fitted back to the process site, system box up, necessary cleaning/housekeeping of the working site, performance check of the serviced machinery/equipment during Normal process operation and as per the site requirement.

- v. Repairing and overhaul maintenance/servicing of **vacuum pump** assemblies used for vacuum transferring of Radiochemical fluid substances from RVDF system.

**Quantity: Total 01 no.(Vacuum pump)**

Type- Rotary  
Model- PPIS 200 H-362  
MOC- Cast steel/CI  
Motor hp.- 15 kw, 1450 RPM

Complete Dismantling of the pump assemblies from the site, washing/cleaning, decontamination assessment of fault, fault rectification, checking the condition of packing/sealing, impeller, suction strainer, Impeller casing, coupler and spider unit, Pump's sound/vibration, replacement of the faulty part (if any), complete servicing, Lubrication/greasing of the moving parts, functionality testing of complete assemblies and fitted back to the process site, system box up, necessary cleaning/housekeeping of the

working site, performance check of the serviced machinery/equipment during Normal process operation and as per the site requirement

- vi. All Technical work force/manpower, machinery, tools and tackles to be arranged by the contractor for the execution of the work/jobs.
- vii. All the Personal Protective Equipment (PPE) [boiler suits, Safety Goggles, approved comfo mask, hand gloves, PVC/Safety shoes are compulsory] required for the job shall be arranged by the contractor/vendor only.
- viii. Vendor should have experience in working in radioactive plant area. Worker should know the material identification, cleaning and repairing job.
- ix. Work is to be started only after proper cleaning and decontamination of the equipment at the plant site under the guidance of departmental supervisor only.
- x. Vendor will be responsible for safety of personnel and used materials during the above said job/works.
- xi. Above said work will be carried out at UED, BARC plant site on all working days (except Saturday, Sunday & public holidays) between 10.00 hrs to 18.00 hrs for 8 hours or as per plant requirement under the supervision of BARC representative
- xii. Vendor has to provide/depute adequate technically skilled and experienced workforce with supervisor dedicated to above said Job only on all working days (except Saturday, Sunday & public holidays) between 10.00 hrs to 18.00 hrs for 8 hours or as per site requirement.
- xiii. The Vendor/Contactor shall execute the job as per AERB safety guidelines strictly and under the guidance of the departmental supervisor at site. This will be strictly monitored.
- xiv. Successful Vendor/Contactor should arrange for Fitness Certificate of his Technical staff /persons to be employed for this job from Certified Medical Officer, fill the forms given after getting Work Order (Annexure 1&2) for submission to HP Unit, UED and should get clearance from HP Unit, UED and Safety Coordinator, UED before starting
- xv. the job. TLD will be issued to the all Technical staff /persons which will be monitored as per Health Physics procedure. Two copies of passport (PP) size photos are to be submitted to Health Physicist, UED for obtaining TLD. After completion of work order, all TLD's along with name list and request for cancellation for TLD batches should be submitted to Health Physicist Unit (HPU), UED by the Vendor/Contractor (if no other radioactive related job apart from work order issued against this Tender is being carried out by Vendor/Contractor in UED).
- xvi. The Vendor/Contractor should approach and get clearance certificate from RSO, UED for his worker before terminating any staff from the job. This is the responsibility of the Vendor/Contractor only (Solely Responsible) for any related dispute.
- xvii. Any injury/damage caused to the Vendor's/Contactor's work force during execution of the job for any reasons whatsoever shall be the liability of the Contactor only.

- xviii. The Vendor/Contactor shall follow the Industrial Safety Regulations strictly during the job.
- xix. As per BARC security norms, the Vendor/Contactor shall have to obtain the Police Verification Certificate (PVC) to work inside BARC for all the persons to be employed for this work and should be comply with all security regulations strictly.

**3) Quantity of Work:**

Sr. No.	Description of Work :	Quantity
1.	Repairing, servicing, testing and maintaining of different Radiochemical Process plant Equipment / systems and miscellaneous associated work / jobs at UED, MG, BARC, Trombay, Mumbai site.  (Job is Site Specific)	01 Complete Job  (As per Tender technical specifications)

**4) Free Issue Material (FIM):** The required material & spare parts (if needed) for equipment repairing and serving work (As mentioned under vendor's scope of work) will be provided by the Division UED). All the repairing, servicing & misc. associated jobs will be carried out at UED, BARC plant site only. Any machinery/Plant equipment will not be sent outside for any modification/serving job.

**5) Facilities available:**

- Forklift facility as and when required and if available.
- Free electricity and water supply for the specific work at site, wherever available and if required.
- Place for keeping tools and tackles during work order period. After completion of work order, Vendor/Contractor will have to surrender the place to the departmental supervisor.
- Necessary entry permit/photo passes for vendor's staff with pre intimation on production of required documents.

**6) Price:**

The vendor should quote the price on **Lump sum basis only (i.e. for one complete job as mentioned in quantity of work title)** and in total along with applicable Taxes, Levis mentioned separately (to be added to the total amount). Minor alteration /addition of the job as per site requirement shall be accepted by the vendor without adding any extra cost. Price should not be varied throughout the contract period.

**7) Validity:**

Price should be valid throughout the contract period. Minimum validity period of vendor's offer shall be 60 days from the due date.

**8) Penalty:**

Penalty [at the rate of ½ % per week of the total cost (max 5%) or as applicable] will be charged if the job is not completed within the specified time without valid reason, as applicable.

**9) Inspection & Testing:**

The job will be done in the supervision of departmental representative up to his/her satisfaction. Entire work shall be inspected, tested and certified by Divisional representative.

**10) Work completion period:**

Within 06 [Six] months from the date of confirmation of acceptance of Work Order. In case of any extension of work completion period, vendor should request for extension well before the expiry of work order in writing with appropriate and acceptable reason.

**11) GURANTEE:** The Vendor/contractor shall guarantee against any workmanship defect and trouble free performance for a period of one (01) year from date of work completion.

**12) Payment:**

No advance/part payment will be made to the vendor. PAN / TIN/GST number is compulsory on the Bill for release of the payment. Payment (100 %) including taxes will be made (through ECS) only after the completion of the job, final acceptance of the total job and submission of the following documents:

- Advance stamped Receipt and ECS details.
- Original Bill
- Job completion certificate
- Undertaking letter of GST
- Undertaking latter of ITR

**The Vendor / Contractor / Firm will not be eligible to claim any interest on account of delay in receiving any payment.**

**13) Deduction of Taxes & Surcharge:**

Income Tax and surcharge on tax as applicable shall be deducted from vendor's bill.

**14) Confidentiality clause: Note:**

[Reference: (2/Misc-9/Lgl/2001/92 dated April 30, 2001, BARC)]

**Confidentiality:**

No party shall disclose any information to any third party concerning the matter under this contract.

**Restricted information:**

Categories under Section 18 of the Atomic Energy Act, 1962 and "Official Secrets" under Section 5 of the Official Secrets Act, 1923-Any contravention of the above mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.

**Prohibition against use of BARC'S name without permission for publicity purpose:**

The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC'S name for any publicity purpose through any public media like press, Radio, TV, or internet without the prior written approval of BARC.

**15) General Instructions:**

- i. Party should aware about the entry procedure of BARC. PVC is required for site work for all workers and it is to be made by party. Party should be responsible to submit all the supporting documents for the preparation of entry pass.
- ii. Party should clearly mention/write the Tender No. ,due date, party's name and subject on the top of sealed envelope containing offer and to be addressed to, Head, UED, BARC, Trombay, Mumbai-85.

- iii. Quotation/s should be sent by Speed Post or Ordinary Post of Indian Postal Services only. Courier/Hand delivered Quotation/s will not be entertained. Quotation/s received after the time mentioned in Due Date will be treated as invalid quotation/s and will not be taken in consideration.
- iv. **Please mention your CST No., PAN No., GST No. in the all the documents submitted for payment.** Failing of the same may delayed their payment
- v. The offer must be signed by competent authority with his/her rubber stamp if any otherwise company stamp.
- vi. Vendor should follow all the safety procedure and rules while working inside BARC. Safety and labor related all issues & any dispute are the responsibility of the vendor's only. The vendor should understand the job thoroughly along with all general requirements before accepting work order.
- vii. Any dispute and obligation related to safety, accident and other arise while working insides BARC is the responsibility of the vendor only.
- viii. Confidentiality clause should be followed strictly by the vendor failure of which can lead to Disciplinary Action against the vendor.
- ix) Conditional and unsigned tenders. Tenders containing absurd rates and amounts, tenders which are incomplete and tenders which are not in accordance with the tender conditions are liable to be rejected.
- x) The BHABHA ATOMIC RESEARCH CENTRE reserve the right to reject any or all the tenders received or accept any tender or part thereof without assigning any reason thereof. In case of acceptance of a part of tender, the time for completion may also be reduced to the extent considered appropriate by the accepting authority.

Thanking you,

  
(N. Singh)

Yours faithfully,



Dr. S. Manna,

SO/G,UED

(for and on behalf of President of India)