



भारत सरकार
परमाणु ऊर्जा विभाग

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY

Bhabha Atomic Research Centre
Isotope & Radiation Application Division

Head, IRAD,
EBPS, ILU - Electron Beam Accelerator Facility,
REPF Hall, BARC-BRIT Complex,
Sector-20, Vashi,
Navi Mumbai; Pin: 400705, Maharashtra, India
Ph. 91-22-27887340-3
Fax: 91-22-27840022

Limited Tender

Ref. : IRAD/EBPS/31/2022/06/05

Date: 06/06/2022
02

To,

Sub:- Minor Fabrication for Repairing and Servicing of 15 Ton Local Chiller plant ,servicing of D M water Plant, & Servicing of Exhaust blower & calibration of Ammeters and voltmeters etc. of Electron Beam Accelerator ILU-EBA Facility.

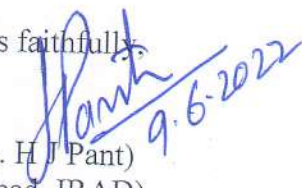
Dear Sir,

1. Quotations are invited for the fabrication / repair job, as per the above specifications.
Minor Fabrication for Repairing and Servicing of 15 Ton Local Chiller plant ,servicing of D M water Plant, & Servicing of Exhaust blower & calibration of Ammeters and voltmeters etc. of Electron Beam Accelerator ILU-EBA Facility.
2. Bidder shall quote for fabrication of these components with his own material.
3. The quotations must reach, **E B P Section, 27th June, 2022** and must be sent in a sealed envelope super scribed with the above reference number and due date & by **Indian Postal Service Only**.
4. The address on the envelope should read: **Head, EBPS, I R A Division,
REPF Hall, ILU- EBA Facility, BARC-BRIT Vashi Complex,
Sector 20, Vashi, Navi Mumbai 400 705
Attn: Shri S A Khader, OIC (ILU-EBA)**
5. The bidder shall have to take an insurance against any material issued to him by the purchaser.
6. Copies of PVC for their employees should be submitted for verifications.
6. The fabrication work shall be subject to inspection by our officers. The finished components shall not be dispatched prior to approval by our officers at bidder's work's Necessary inspection facilities should be provided to our officers during the fabrication at bidder's premises.
7. The bidder shall deliver the finished items / components after approval by our officers, within **Six(6) Weeks**. The finished items/components and the scrap from the issue materials if any shall be delivered by the bidder at REPF Hall, ILU EBA Facility, BARC-BRIT Vashi Complex, Sector 20, Vashi, Navi Mumbai 400 705

8. The party must offer warranty on the fabricated components for satisfactory performance for a period not less than six months.
9. No advance payment in full or in part will be admissible and payments will be made after satisfactory installation.
10. The goods proposed to be fabricated based on this NIT (Notice Inviting Tender) is meant for research purposes of Research Institution under the Dept. of Atomic Energy and therefore the prices to be quoted for the product should be exclusive of the excise duty. The purchaser will make available to the successful bidder with whom a work order is placed the excise duty exemption certificate duly signed by the authorized officer in the Dept. of Atomic Energy well before the dispatch of the goods by the supplier. While submitting the offer, the bidders should specify in his offer that the price quoted by him does not include any element of excise duty, subject to production of exemption certificate. Where however, the prices quoted are inclusive of excise duty, the percentage/quantum of Excise included in the quoted price should be specifically indicated in the tender.
11. The acceptance of quotation will rest with **Head IRAD, BARC** who does not bind himself to accept the lowest or any quotation and reserves to himself the right to reject any or all quotations received without assigning any reason whatsoever.
12. Bidder shall provide PAN Number, GST Number, TIN Details should be mention in then quotation.

**Last date for receipt of quotation 27th June, 2022 up to 14.00 Hrs.
The quotations will be opened on the next working day at 15.00 hrs**

Yours faithfully,


(Dr. H J Pant)
(Head, IRAD)

Copy to:

1. APO, PMD, BARC-Vashi complex. Navi mumbai-for kind display in Notice Board.
2. APO, BRIT, BARC-Vashi complex. Navi mumbai-for kind display in Notice Board.
3. Head, SIRD, BARC, Trombay, Mumbai- for kind display in BARC web site.

Technical Specifications

Sub:- Minor Fabrication for Repairing and Servicing of 15 Ton Local Chiller plant ,servicing of D M water Plant, & Servicing of Exhaust blower & calibration of Ammeters and voltmeters etc. of Electron Beam Accelerator ILU-EBA Facility.

Sl. No	Description of the Item	Quantity
1	Repairing and servicing of 15 ton local chiller plant <ol style="list-style-type: none">1. Drier Replacement2. Liquid Indicators Replacement3. Service Valves Replacement4. Copper Pipe Modification & Replacement5. Commissioning, Servicing, Gas Charging, Pressure Testing, Brazing etc6. Nitrogen gas & Freon Gas cylinder7. Brazing of water cooled copper formic inductor connector	03 Nos. 03 Nos. 03 Nos. 01 No. 01 No. 01 No. 02 Nos 06 Nos.
2	Calibration of Ammeter and Voltmeters and other meters etc. of ILU-EBA Accelerator as per attached list.	1 No.
3	Servicing of D M Water plant.	01No.
4	Servicing of Exhaust Blower	02 nos.

(1)

ILU-EBA Meters and Instruments Calibration

Note: 1. Parameters as per NABL Scope.

2. Accuracy ~1%.

3. Calibration frequency once in two years.

A. Meters Calibration

Instrument Receipt No.					
Sr. No	Instrument	Sr. No/I D No.	Range	Instrument Location	Remarks
1	Ammeter a)Tube Heat b)Rectifier	71146	a)0-1000 Amp b)0-500Amp	In House (ILU-EBA Control Panel)	
2	Ammeter Injector Filament	83367	0-50 Amp	In House (ILU-EBA Control Panel)	
3	Ammeter Beam Current	84678	0-50 mAmp	In House (ILU-EBA Control Panel)	
4	Ammeter Vacuum	86478	0-50 mAmp	In House (ILU-EBA Control Panel)	
5	Ammeter Focusing Magnet	M 42301	0-500 mAmp	In House (ILU-EBA Control Panel)	
6	Ammeter Scanning Magnet	M 42305	0-5 Amp	In House (ILU-EBA Control Panel)	
7	Voltmeter Input supply PCC1	1/2K/89377/ 3 Make: AE	0-500 Volt	In House (electrical Control Panel)	
8	Voltmeter Digital	PLA DC Digital	0-2000 Volt	In House (electrical Control Panel)	
9	Voltmeter Bias	03231	0-10 KV	In House (Control room control	

Shahid Ashraf

				Panel)	
10	Ammeter Input Supply PCC1	80015A Make: AE	0-800 Amp	In House Electrical Panel room	
11	Ammeter Digital A/Ac Power Roller Panel	MECO-G Digital	0-5 Amp	In House (Conveyor Control Panel)	
12	Voltmeter Digital V/AC Power Roller Panel	MECO-G	0-500 Volt	In House (Conveyor Control Panel)	
13	Water Temperature Meter Modulator Inlet	F14171/1017 0	0-50 °C	In House (Control room)	
14	Water Temperature Meter Modulator outlet	F14172/1017 0	0-50 °C	In House (Control room)	
15	Water Temperature Meter Accelerator inlet	F14170/1017 0	0-50 °C	In House (Control room)	
16	Water Temperature Meter Accelerator outlet	F14173/1017 0	0-50 °C	In House (Control room)	
17	Water Temperature Meter of main chiller input	H- Guru L-28	0-50 °C	In House Pump room	
18	Water Temperature Meter of main chiller output	H- Guru L-28	0-50 °C	In House Pump room	
19	Water Temperature Meter of secondary loop input	H- Guru L-28	0-50 °C	In House Pump room	
20	Water Temperature Meter of secondary loop output	H- Guru L-28	0-50 °C	In House Pump room)	
21	Water Pressure Gauges input of main chiller plant	P194 G6	1-10.6 Kg/Cm ²	In House Pump room)	
22	Water Pressure Gauges	P196 G6	1-10.6 Kg/Cm ²	In House Pump room	
23	Water Pressure Gauge output of main chiller plant	P201 G6	1-10.6 Kg/Cm ²	In House Pump room	

Shahid Asadul Huda

24	Water Pressure Gauge secondary loop input	P199 G6	1-10.6 Kg/Cm ²	In House Pump room)	
25	Water Pressure Gauge secondary loop output	P198 G6	1-10.6 Kg/Cm ²	In House Pump room	
26	Water Pressure Gauge	P200 G6	1-10.6 Kg/Cm ²	In House Pump room)	
27	Water Pressure Gauge	P--- G6	1-10.6 Kg/Cm ²	In House Pump room	
28	Water Pressure Gauge	P--- G6	1-10.6 Kg/Cm ²	In House Pump room	
29	Water Pressure Gauge	P--- G6	1-10.6 Kg/Cm ²	In House Pump room	
30	Water Pressure Gauge	ST03-P10-21	0-10Kg/Cm ² 0-150 PSI	In House Pump room	
31	Water Pressure Gauge	ST03-P10-21	0-10Kg/Cm ² 0-150 PSI	In House Pump room	
32	Ammeter PCC3 panel of pump room	-----	0-150 Amp	In House Pump room)	
33	Voltmeter PCC3 Panel of pump room	-----	0-500 Volt	In House Pump room)	
34	Conductivity Meter in pump room	-----	0-40 Micro Siemens/cm	In House Pump room)	
35	Pressure Gauge local chiller plant	-----	0-7 Kg/cm ²	In House Pump room	
36	KWH Meter	Schneider conserve EM6433	0-500 Volts AC Current 0-1000 Amp	In House Electrical Panel room	
37	Modulator pressure gauge	N284067	0-9 Kg/cm ²	Modulator cabin 2	
38	Modulator pressure gauge	N203601	0-9 Kg/cm ²	Modulator cabin 2	
39	Sputter ion Vacuum pump	24292	0-100 Micro Amp	Electrical panel room	
40	Sputter ion Vacuum pump	M906/10067	0-100 Micro Amp	Electrical panel room	

Shahin Asadul Huda

41	Sputter ion Vacuum pump Ammeter	30622	0-100 Micro Amp	Electrical panel room	
42	Sputter ion Vacuum pump Ammeter	51233	0-100 Micro Amp	Electrical panel room	
43	Sputter ion Vacuum pump Ammeter	17328	0-100 Micro Amp	Electrical panel room	

B. Instruments Calibration

Receipt No.		Sr. No/ID No.	Range	Instrument Location	
Sr. No	Instrument				
1	Oscilloscope (CRO)DSO6034A Make : KEYSIGHT	MAC 00-30- 03-21-E3-B2	300MHz 2Gsa/s	On site	
2	Multimeters	DMM916	0-100V DC 0-750 V AC 10Amp 400 mAmp	On site	
3	Conductivity Meter			On site	
4	PH Meter			On site	
5	Earth Tester Digital Make: Megger	DET42CR2	0-100 V 94 Hz-105Hz 111 Hz-128Hz	On site	
6	Megger Digital Make: Megger Range :500V-5 KV	MIT525	500-5KV	On site	
7	Megger Analog Make: Shanti	1849/4911	0-10KΩ∞ 0-100KΩ∞ 1000V MΩ÷5 2500V MΩ÷2 5000MΩ×1	On site	

Shauk Abdul Khudr

Terms and Conditions

I) Free issue of material: No Free Issue material shall be provided by the department.

II) Material to be supplied by the contractor: All the materials for the execution of the job as mentioned in the scope of work, helmets, safety Belts, safety shoes, marking & measuring instruments, and all the tools & equipment /instruments required during fabrication shall be supplied by the contractor only.

III) Inspection & Testing: an authorized inspector from the division will inspect the fabrication work on the site, regularly. He will have full access to the site and shall have an authority to check the dimensions, straightness of the members, types of material used and nature and type of weld joint. After the entire fabrication, installation and erection work is over the inspector only will inspect the structures and issue the 'Work Completion Certificate' if the job is found satisfactory in all respect.

IV) Note:

1. Details of the job & technical specification is attached herewith.
2. Since work should be executed immediately, the bidders who have existing work force with police verification certificate (PVC) issued by Police department are preferred to participate in this tender. The PVC is a mandatory requirement for entry & work in BARC premises.
3. The firm should have preferably vetted for security clearance by security department of BARC.
4. Copy of the PVC for the employees of the bidder shall be enclosed along with the offer. Since this job involves site work at BARC premises; any offer without copies of the valid PVC will not be accepted
5. All materials required to execute this work should be procured and supplied by the contractor and fabrication should be carried out at site
6. Time period to complete this work will be 6 weeks from the date of issue of work order. Time is the essence of this tender and hence no extension will be permitted.
7. No advance payment will be made for execution of this work. 100% payment will be released after completion and satisfactory commissioning of the work and certification by our Engineer.
8. The contractor and their workmen shall take all safety precautions as per standard procedure while executing the job.
9. All tools & safety gears required for executing this work should be provided by the contractor
10. This department will not be responsible for any accident happens while doing any job and no compensation will be payable by this department for any such incidents.
11. The successful bidder shall give guarantee in writing for materials used and workmanship for a period of one year from the date of completion and commissioning of the work
12. If any part of the work is to be sub contracted, the details of such sub contractor should be clearly mentioned in the quotation.
13. **Liquidated damages:** Any delay in execution of the work, which is attributable to the contractor, is liable for penalty @ 1/2 % per week (max. 5%) will be imposed on successful contractor.
14. **Termination clause:** If the work is not executed to our satisfaction or delayed beyond reasonable time, the purchaser shall have the option to terminate the work order as is where is condition at any time during the currency of contract and the work shall be got executed through other agencies at your cost.

Shahin Ashraf Khuday

15. Evaluation and acceptance criteria.

1. Since work should be executed immediately, the bidders who have existing work force with police verification certificate (PVC) issued by Police department are preferred to participate in this tender. The PVC is a mandatory requirement for entry & work in BARC premises.
2. The firm should have preferably vetted for security clearance by security department of BARC.
3. Bidder should have previous experience in similar type of work executed in BARC or any other reputed organizations.
4. Bidder should have licensed and qualified technicians with field experience in similar type of job.
5. Lowest technically suitable offer will be considered for placing the work order.
6. Total cumulative lowest price and technical suitability of vendor will be considered for this job.
7. If any work is to be sub contracted, the details should be explicitly mentioned in the quotation. Such sub-contractor also will be evaluated before acceptance of the offer.
8. Bidder should be ready to provide all safety gears to their technicians.

16. Confidential close:

- a. No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "proprietary" in nature by disclosing party shall be kept strictly confidential by the receiving party without the prior written consent of the original disclosing party.
- b. This clause shall apply to the sub-contractors, contractors, advisors, or the employees engaged by the party with equal force.
- c. **"Restricted Information" categories under section 18 of the Atomic Energy Act, 1962 and "official secrets" under section 5 of the Official Secret Act 1923.**
- d. Any contravention of the above mentioned provisions by any contractor, sub-contractor, consultants, advisors or the employees of the contractor will invite penal consequences under the aforesaid legislation. **Prohibition against the use of BARC's name without permission for publicity purposes.**

The contractor, sub-contractor, consultants, advisors or the employees engaged by the contractor shall not use BARC's name for any publicity through any public media like Press, Radio, T.V., or Internet without prior written approval of BARC.

Shah Asadul Khaliq