

Government of India
Bhabha Atomic Research Centre
Electromagnetic Application and Instrumentation Division

Ref: EmA&ID/EMAS/19/81421

Date: 1/5/2019

Sub: Engineering and logistics support for assembly, integration, material handling and qualification of RF cavities, Accelerator Magnets, High Power RF sources, Accelerator instrumentation and High strength Dipole magnet and superconducting magnets as detailed in EmA&ID/MP/01

Dear Sir/Madam,

1. Quotations are invited for Engineering and logistics support for assembly, integration, material handling and qualification of RF cavities, Accelerator Magnets, High Power RF sources, Accelerator instrumentation and High strength Dipole magnet and superconducting magnets as detailed in EmA&ID/MP/01.
 2. Bidder shall quote for only for logistics and engineering support which includes the skilled and semi-skilled man power required for carrying out the job as described in tender specifications.
 3. Taxes and Excise Duties shall be quoted separately. Form AF / H whichever is applicable shall be provided, if required.
 4. **The quotation must reach The Head, Electromagnetic Application Section, Electromagnetic Application and Instrumentation Division by 15/5/2019 (12:00 Noon) and must be sent in a sealed envelope super scribed with the reference number & the due date given above. Courier are not allowed in BARC premises, the quotation shall be sent by speed post/registered post.**
 5. The address on the envelop should read: **The Head,
Electromagnetic Application Section,
Electromagnetic Application and
Instrumentation Division,
BARC, Trombay,
Mumbai - 400 085.
(Kind Attn: Elina Mishra, SO/D)**
 6. The duration of work is as specified in the technical specification sheet starting from the date of issue or work order. The supplier can raise monthly bills covering manpower cost of each month. The manpower supply has to be "on demand basis" during the execution of the work order.
 7. Head, Electromagnetic Application and Instrumentation Division reserves the rights to accept / reject any or all quotations without assigning any reason.
 8. Quotation must also indicate the validity of offer. Quotation must also indicate the VAT no and PAN no of the party.
 9. Drawings / Sketches must be returned along with the offer.
 10. The quotation has to be signed by authorized person with company seal.
 11. Payment will be made by cheque only after satisfactory completion of work on production of bill, delivery challan and advance stamped receipt. It may be noted that IT @ 2% and surcharge on tax at 15% shall be deducted from your bills.
 12. In case of any technical clarification, the supplier may kindly contact: Ms. Elina Mishra, SO/D or Mr. Vikas Teotia, SO/E, EMAS, EmA&ID (Email ID: elinam@barc.gov.in / vteotia@barc.gov.in, Telephone No: 022 2559 3943)
- Encl.: Technical Specification no: - EmA&ID/MP/01



(Sanjay Malhotra)
Head, EmA&ID

Technical Specifications
Document Number: EmA&ID/MP/01
Total number of pages: 2

1. These tender specifications include Engineering and logistics support for assembly, integration, material handling and qualification of RF cavities, Accelerator Magnets, High Power RF sources, Accelerator instrumentation and High strength Dipole magnet and superconducting magnets as detailed in EmA&ID/MP/01. Table below gives nature of work associated with each of the activity.

System	Nature of Work
RF cavities	Mounting of Drift Tubes, Tuners, post couplers, vacuum pumps, H-field monitors, assembly of bead-pull measurement set-up, assistance during RF and geometric measurements, material handling, material lifting and shifting, measurement bench setup, RF measurements, assembly of Hydraulic systems, hydraulic testing, commission of DTL, hydraulic system and vacuum pumps in linac cavern, fabrication and assembly of various jigs and fixtures.
Accelerator magnets and Dipole Magnets	Assembly of Permanent magnets in sprockets, assembly of Drift tubes, assistance in Hydraulic qualifications, Assembly of electromagnetic quadrupole yokes, coils, assembly of permanent magnets in dipoles, base platforms, material handling and assistance in magnetic measurements, fabrication and assembly of various jigs and fixtures.
High Power RF systems and Accelerator Instrumentation	Assembly of waveguides, Klystron, soldering and different electrical connections in various Accelerator beam instrumentation and control systems

2. The supplier shall provide technicians/fitters/helpers for engineering and logistics support in above projects as per the requirements communicated to him by purchaser's representative.
3. Division of required man-days of technicians/fitters and helpers is as follows

SN	Particulars	Total man-days (covered over period of one year from placement of work order)	Basic Qualification
1.	Technicians	120 man-days	ITI/equivalent in relevant trade
2.	Helpers	120 man-days	Matric pass

4. Locations of work: RCnD, CFB, South Site, Mod lab BARC Trombay
5. Duration of execution of work: 135 days for technician (fitter/electronics) and 120 days for helper.
6. Payment: Supplier can raise monthly bills covering the cost of man-power supplied.
7. Quotation format: The bidders shall give quotations in following format

Engineering and logistics support for assembly, integration, material handling and qualification of RF cavities, Accelerator Magnets, High Power RF sources, Accelerator instrumentation and High strength Dipole magnet and superconducting magnets

	Total man-days	Labour cost/man-day	Total Cost
Technicians (Fitter)	68 mandays		
Technicians (Electronics)	67 mandays		
Helpers	150 mandays		
Taxes (Service tax etc.)			

8. The purchaser will give intimation to the supplier on week in advance for a requirement.

9. Minimum man-days requirements per month

SN	Particulars	Minimum Monthly Man days
1.	Technician	20 man-days
2.	Helper	20 man-days

10. General Instructions

- a. The above job shall be done strictly under the supervision of BARC engineers.
- b. All the necessary tools, instruments, material and hardware will be provided by BARC.
- c. Working personnel shall behave well with other officers and workers inside BARC campus.
- d. The supplier shall be solely responsible, in case of any casualty involving working personnel. However, first aid will be provided by BARC.
- e. General BARC security rules shall be applicable to all the working personnel.
- f. The responsibility of all formalities for obtaining entry permit is with supplier. Necessary documents if required by the security will be provided by purchaser on written request. Supplier and manpower provided by supplier shall have valid photo pass with valid Police verification certificate (PVC) as per the norms of BARC security.
- g. Prior permission will be taken from security if the persons are required to do the job on Holidays and beyond normal working hours (8:00 Hrs to 18:00 Hrs).