



Government of India
Bhabha Atomic Research Centre
Electromagnetic Applications & Instrumentation Division



Tender No. : EmA&ID/JI/2021/122575

Date: 20th Sep, 2021

Sub: Fabrication, qualification and supply of dry vacuum system as per specification sheet- TSP/2021/05

Dear Sir/Madam,

1. Quotations are invited for the *execution of subject work*.
2. Taxes and Excise Duties shall be quoted separately. Form AF / H whichever is applicable shall be provided, if required.
3. The suppliers are shall submit the cost for Design, fabrication, assembly and testing. All necessary tools, instruments have to be arranged by the supplier.
4. The quotation must reach the undersigned on or before **30th Sep, 2021** and must be sent in a sealed envelope super-scribed with the *reference number & the due date* given above.
5. The quotations must reach us on or before the aforesaid date by India post (by speed post or ordinary post) only.
6. The address on the envelop should read:
The Head,
Electromagnetic Applications Section,
Electromagnetic Applications & Instrumentation Division
RCnD Bldg., North Site,
B.A.R.C, Trombay,
Mumbai - 400 085.
(Attn: Shri. Vikas Tiwari)
7. The finished components with the test certificates as mentioned in the enclosures shall be delivered by the manufacturer after the award of the contract at BARC, Trombay, Mumbai - 400 085.
8. Delivery, packing & forwarding charges, if any, must be clearly mentioned in the offer.
9. Drawings / Sketches (if any) must be returned along with the offer
10. Quotation must indicate the PAN and GSTIN no of the vendor. Minimum validity of 60 days is preferred.
11. The quotation has to be duly signed by *authorized person with company seal. Unsigned offers shall be treated as invalid.*
12. For any technical clarifications, Please contact the undersigned vide email: vikast@barc.gov.in; Tel: +912225591492/6899
13. All items delivered under this work order are developed solely for R&D purpose for use at EmA&ID, BARC, Trombay, hence, requisite exemptions shall be granted to successful contractor

Encl.: TSP/2021/03

(Vikas Tiwari)
Technical Officer(C), B.A.R.C
For & on Behalf of the President of India
(The Purchaser)

Specification no.	Revision no.	Date of Issue
TSP/2021/05	0	20 th Sep, 2021

Fabrication, qualification and supply of dry vacuum system

1.0 Outline:

Tender is invited for above as per the undermentioned specification

2.0 Scope of work:

2.1) Supplier shall fabricate the pump and the motor as as per the below specification

3.0 FREE ISSUE MATERIAL:

NO free issue material will be issued to the contractor.

4.0 DELIVERABLE:

The deliverables included in this tender are as follows:-

For the FIM supplied by the purchaser, the items highlighted under table-1.0 are to be delivered:

S no	Description	Quantity
1	Fabrication and supply of scroll pumps	04 Nos
2	Flexible electropolished vacuum bellows - 1m long with ISO K 25 flanges including centering rings and clamps	10 Nos
3	ISO KF16 to KF 25 Converter (electropolished) in single machined form*	10 Nos
4	ISO KF16 to KF 10 converters with matching centering ring with viton o-ring	10 Nos

Table-1.0

**Welding is not permitted*

5.0 Technical Specification:

S No	Parameters	Value
1	Peak Pumping Speed	12.7 m ³ /h
2	Ultimate base pressure	< 8x10 ⁻³ Torr
3	Nominal Rotation speed	1800rpm
4	Standby rotation speed	< 1250 rpm
5	Input voltage	230V, 50Hz
6	Motor power	<400W
7	Expected maxium inlet pressure	< 200torr
8	Inlet /exhaust flange	NW25
9	Operating temperature range	10 to 40C
10	Accessories	Flexible vacuum bellows - 1m long with ISO K 25 flanges with centering rings and converters All to be electropolished

Table-2.0

6.0 PERFORMANCE OF THE CONTRACT

6.1 Fabrication and Delivery Schedule

- A) The purchaser representative shall be apprised of the changes incorporated in the vehicle compartments to do the needful.
- B) The entire work has to be completed in 3 months
- C) During testing, purchaser representatives shall be witness to verify the results and confirm the compliance with the tender specification.

6.2.3 Quality Control Records

The QCR shall contain:

- (a) Mill test Certificate of the copper plates with BIS compliance as per IS:648
- (b) CMM based geometrical inspection report of the laminations
- (c) CMM based geometrical inspection of the assemblies

7.0) Warranty:

7.1) Supplier shall be duty bound to provide warranty and adequate after sales support to the entire warranty period in case any failure for a period of 1 year.

8.0 GENERAL DESCRIPTION:

8.1) Supplier shall submit the offer including the fabrication, assembly and testing

8.2) Overall cost will be compared and include packaging, forwarding and safe delivery to purchaser site.
