



Indian Institute of Technology Kanpur

Department of Physics

Tender Ref. No.IITK/PHY/2023-24/SoM/02

Date: 5th April 2023

Bid Opening Date : 05/04/2022

Bid Submission Closing Date : 15/04/2023

Sealed quotations (**Technical and Financial separately**) from prospective vendors are invited by the Department of Physics, IIT Kanpur for “**Dry Scroll Pump**” with the following technical specification. All the quotations and tender related documents should be sent by speed post/Courier to the inviting officer’s address (mentioned below).

We are looking for Dry Scroll Pump (Quantity:01)

TECHNICAL SPECIFICATION FOR Dry Scroll Pump

S. No.	Technical specification	
1.	Dry Scroll Pump:	
1.1	Base pressure (50 Hz) - Torr & mbar	1.5×10^{-2} Torr
1.2	Dimensions (WxHxL)	~ 10.05 in x 11.7 in x 16.54 in
1.3	Height	~ 11.7 in
1.4	Length	16.54 in
1.5	Inlet Connection	NW25
1.6	Exhaust Connection	The output connection should be compatible with HEPA filter assembly which has VCO connections at input and output
1.7	Pumping Speed (50 Hz)	10.2 m ³ /h at full rotational
1.8	Input Voltage	200-240 VAC
1.9	Motor rating	0.5 HP (350W)
1.10	Maximum inlet pressure	1.0 atmosphere (0 psig)
1.11	Maximum outlet pressure	1.34 atmosphere (5 psig)
1.12	Noise Level	< 55 dB(A)
1.13	Operating Environment Temperature	5 to 40 °C
1.14	Shipping Weight	~ 28.0 kg
1.15	Weight (pump only)	~ 25 kg
1.16	Width	~10.00 inch
1.17	Application	This Scroll pump will be used for Helium circulation between Cryomech made Reliquefier and Quantum Design Made Gas Manifold in PPMS System.
1.18	Water vapor handling	120 grams/hr
1.19	Motor thermal protection	Automatic thermal protection
1.20	Cooling system	Air-cooled

1.21	Leak rate (with exhaust sealed)	<1 x 10 ⁻⁶ sccs (1 x 10 ⁻⁶ mbar.l/s)
1.22	Vibration level at inlet	7 mms ⁻¹ rms
	Additional Accessories	
1.23	i. Exhaust silencer, Qty– 01 ii. Tip Seal Replacement Kit, Qty – 02 iii. Tip Seal Replacement Kit for existing Dry Scroll Pump (Agilent Make, SH-110), Qty- 01	

Minimum Eligibility Criteria:

- 1) Bidder should submit printed technical literature / brochure of the offered model, which should be fully complied with the specification as mentioned above otherwise the bid will be disqualified.
- 2) The OEM should successfully installed and commissioned similar or higher rating Systems to any Govt. / Defence / Research Institutions. Copy of PO / Installation report / Performance certificates should be submitted towards evidence.
- 3) The OEM should have minimum 10 years of experience in vacuum pump manufacturing.

General Terms & Condition:

1. All vendors are requested to submit **“Technical and Financial bids”** together in separately sealed envelopes.
2. Evaluation will be done on the basis of technical specifications given in tender document.
3. Financial bid will be open for those only who qualify all the technical specification as per our tender notice.
4. Quotation must be valid for 30 days.
5. Payments terms: 100% after delivery & successfully installation.
6. Warranty should be clearly mentioned, the Warranty must start from the date of installation at IITK.
7. Only OEM or its authorized agents should quote. Quotation should carry proper certifications like proprietary certificate/ authorization certificate from manufacturer, etc.
8. Vendor must be able to perform factory acceptance testing of the product and demonstrate all the features prior to the dispatch.
9. The technical and price bid should indicate the model and part numbers of items quoted.
10. Bidders must submit minimum 5 satisfactory certificates from previous users.
11. Delivery time 6-8 week from the date of receipt of purchase order.

12. As per the new GST rule, Institute is not able to provide GST exemption certificate. GST has to be levied as per the applicable rate.
13. At any time prior to the deadline for submission of bid, the institute may, for any reason, at its own initiative, modify the bid document by amendments. Such amendments shall be uploaded on the website through corrigendum and shall form an integral part of bid document. The relevant clauses of the bid document shall be treated as amended accordingly. It shall be the sole responsibility of the prospective bidders to check the website from time to time for any amendment in the tender document. In case of failure to get the amendments, if any, the Institute shall not be responsible for it.
14. The Penalty @1% per week or part thereof subject to max 10% of the delivery price will be deducted from the balance payment, if supply is not completed within aforesaid delivery period.
15. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved.

Approved by



Prof. Soumik Mukhopadhyay
Professor
Department of Physics
IIT Kanpur, Kanpur – 208016

Inviting Officer



Dr. Biswanath Samantaray
Research Establishment Officer
Department of Physics
IIT Kanpur, Kanpur – 208016
Email: biswa@iitk.ac.in
Phone No.-0512-679-7793