

TECHNICAL BID PROFORMA

Item Name: Turbomolecular pump with dry vacuum pump - 2 Nos

1.0 Bidder Eligibility Criteria:

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content value	Reference, Page No.
I	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 th September 2020 and other subsequent orders issued therein.			
2.0	Bidder Eligibility Criteria-II	Compliance (Yes/No)	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 2 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 2 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			

3.0 Technical Compliance:**Turbomolecular pump with dry vacuum pump - 2 Nos**

S.No	Specification	Comply/ Not Comply	Reference Page No.
1.	Number of units required: 2		
2.	Type of pump: Turbo molecular pumping station with dry vacuum pump		
3.	Backing pump should be diaphragm based dry vacuum pump		
4.	Turbo pumping speed for nitrogen should be 45 lit/sec or more		
5.	Ultimate pressure should be $\leq 1 - 10^{-7}$ mbar		
6.	Pumping speed of backing pump at 50Hz should be 1.2 m ³ /hr or better		
7.	Pumping port should be connecting KF40 flange		
8.	Combined vacuum gauge having measuring range from atmosphere mbar to 10 ⁻⁹ mbar.		

9.	A compact metallic frame for accommodating turbo pump, backing pump, display and control unit should be provided.		
10.	Should be capable of operating in Indian power supply conditions at 230-240 VAC, 50Hz		
11.	The pump should have air cooling provision.		
12.	The maximum sound pressure level should be 50dB(A) for reasonably quiet operation.		
13.	Appropriate valves with nitrite diaphragms should be provided to cut off the turbopump from our chambers to maintain safety and life of pump.		
14.	All the necessary electrical and plumbing lines necessary for the proposed configuration from item no. 2 to item no. 13 including turbo molecular pump, backing pump, gauges and control units should be provided.		
15.	Min. of 1 year warranty from the date of installation should be provided.		
16.	Optional components: Any optional components available with the proposed configuration of pumps should be quoted.		