

SATYENDRA NATH BOSE NATIONAL CENTRE FOR BASIC SCIENCES

[Funded by the Department of Science & Technology, Government of India] BLOCK JD, SECTOR III, SALT LAKE, KOLKATA- 700 098

PHONE: +91-(0) 33-2335 5706-08, 2335 3057/61, 2335 0312/1313

FAX: +91-(0) 33-2335 3477/1364 EMAIL: santosh@bose.res.in

Ref. SNB/ENQ/MP/Rotary Pump /13-14/2126(WP)

12.03.2014

Dear Sir,

Sealed quotations are hereby invited for the following items in two parts (Technical and Commercial bids). One large envelope containing two smaller envelopes containing Part A: Technical Bid and Part B: Commercial Bid need to be submitted separately – Two smaller envelopes should be super-scribed "**Technical Bid**"/"Commercial Bid" as the case may be.

SI. No.	PARTICULARS	Qty.
01.	Double Stage Rotary vane pump	02 nos.
	(Pl. find attached Annexure 1 & see reverse for detailed Technical Specification)	

Technical bid: should contain complete technical information literature/working manual of the quoted item & authorization certificate of the manufacturer.

Price Bid: In case of imported item CIF/CIP Kolkata airport price should be mentioned and for indigenous item FOR basis up to S. N. Bose Centre, Kolkata may be quoted.

Note:

- 1) The quoted price should be inclusive of delivery charges.
- 2) Validity should be for 90 days from the date of opening.
- 3) Minimum one (1) year standard onsite warranty is to be provided.
- 4) Our Payment term is subject to after delivery only.
- 5) Delivery period should be mentioned in the quotation.
- 6) Our ref. no. should be mentioned on top of the quotation envelope.
- 7) Quotation for the above item should reach this office by 25th March, 2014

Thanking you, Yours faithfully,

S. K. Singh AR (Purchase)

Specification of Pumping System:-

Double stage rotary vane vacuum pump, with 2.5 $\rm m^3/hr$ pumping speed along with Oil mist separator and ZEOLITE Trap

Specifications for Double Stage Rotary Vane Pump

- 1) Pumping speed: 2.5 m3/h.
- 2) Flange connection: DN 16 ISO-KF
- 3) Ultimate pressure: 0.005 mbar without gas ballast.
- 4) Noise level: < 55 dB(A)
- 5) Forced oil lubricated bearings.
- 6) Integrated with high speed hydraulically controlled high vacuum safety valve.

Active Pirani gauge head along with its controller

Connection flange: DN 16 ISO-KF

Measurement range: 1000 mbar to 5.10⁻⁴ mbar.

Accuracy: $100 - 10^{-3}$ mbar: $\pm 15\%$ Repeatability: $10^{-3} - 100$ mbar: $\pm 2\%$

Output signal: pressure range: 2.2 – 8.5 V DC

Output signal, minimum load: 10 KΩ

Pressure Max:- 10 bar

Operating temperature: + 5 to + 60° C Temperature, storage: - 20 to + 65° C

Supply: Voltage: 14 - 30 V

Supply: Power consumption max.: 1 W

Filament: Tungsten Feed through: Glass Flange: St. steel Seal: Metal

Rubber Hose Rubber, inner diameter 16 mm - 4 nos.

Hose Connector, DN 16 ISO-KF Aluminum, for 12 mm hose – 4 nos.

Centering ring DN 16 ISO-KF aluminium/FPM – 6 nos.

Clamping ring, DN 10-16 ISO-KF aluminium/steel for elastomer seals – 6 nos.