Indian Institute of Technology Kanpur

Department of Materials Science & Engineering

Enquiry no.: *IITK/MSE/KB/2012-2013/08*

Enquiry date: 29 January 2013
Last Date: *12 February 2013*

Enquiry for High Vacuum pumping system for ARC Melting-Cum-Suction Casting Unit

We would like to purchase for a high vacuum pumping system casting facility for our laboratory scale experimentation. The pumping system will consist of following items with specifications.

Turbo molecular Pump: - Turbo molecular Pump of pumping speed 260 l/s along with necessary accessories

Backing pump: - Double Stage magnetically coupled Rotary Vane Pump of pumping speed 5 m^3/h;

Vacuum Gauges: - Active Pirani transmitter and Active Cold cathode transmitter along with dual gauge display and controller and sensor cables.

Sr.	**Description**
1.	Turbo-drag-pump Connection flange: DN 100 ISO-K Pumping speed: 260 l/s Ultimate pressure: < 1.10^{-7} mbar with double stage rotary vane backing pump and as per DIN28428 standards
	Display control unit with power supply
	Mains cable 230 V AC with schuko-plug, length 3 m
	Connection cable, length: 3 m TC 400 -TPS/DCU 310/400
	Air cooling kit
	Centering ring with multipurpose coating and integrated splinter shield DN 100 ISOK/ -F
2.	**Double stage rotary vane pump model** Connection flange: DN 16 ISO KF Pumping speed: 5 m3ph Supply: 200-240 V, 50 Hz, with switch Ultimate pressure: with gas ballast: ≤ 2.10^{-2}mbar Ultimate pressure: w/o gas ballast: ≤ 5.10^{-3}mbar
	ONF 16, Oil mist separator DN 16 ISO-KF for UNO/DUO 2,5/5 M
	ORF, Oil return device from ONF 16/25 to DUO 5/10/20 M
3.	Clamping ring, DN 10-16 ISO-KF aluminium/steel for elastomer seals

4.	Flexible metal hose DN 16 ISO-KF length: 1000 mm, SS
5.	TPG 262, Dual Gauge complete measuring outfit 90 - 250 V AC Consists of 1. TPR 280, Pirani transmitter, range 1000 mbar to 5.10^{-4} mbar 2. IKR 251, Cold cathode transmitter, range 0.01 mbar to 2.10^{-9} mbar 3. Sensor cables, 2 no's 4. TPG 262 dual gauge controller 5. Mains cable

Term & conditions

Delivery: 8 weeks from receipt of valid P.O.

Warranty: Products will be covered under warranty for a period of twelve months from the date of installation.
During installation of the pumping system, a service engineer from the manufacturer should be present at our laboratory.

Address the quotations to:

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