

Sealed Quotation (Technical & Commercial, separately) must reach to us till 15.08.2015 before 5.00PM and should be sent to Prof. Kamal K. Kar, Department of Mechanical Engineering, Room # ACMS 203D, IIT-Kanpur, 208016 against the enquiry letter numbered ME /KKK/02/2015-16 Dated: July 30, 2015.

Dear Sir/Madam:

Quotations (Technical & Commercial, separately) are invited for purchase of “**Sputtering Unit for Gold Coating of Non Conducting Samples for Scanning Electron Microscopy**” having following specifications:

Specifications and conditions:

SL No.	DESCRIPTION
01	Sputtering Unit for Gold Coating consists of the following <ol style="list-style-type: none"> 1. 8” SS Chamber 2. 2” Cathode 3. 600 Degree Substrate Heater 4. 150 LPM Vacuum Pump 5. 1” Butterfly Valve 6. Pirani Gauge 7. DC Power Supply 8. 1” Bellow

SPECIFICATION FOR SUBSTRATE HEATER

A Substrate Heater made out of Kanthal element is provided to raise the temperature of the substrates to 600 C.

A low voltage / high current Transformer , SSR , PID controller and K-type Thermocouple are part of the powering and control circuit.

Temperature accuracy: +/- 2 C. Max. Power: 500 Watts.

150 LPM Vacuum Pump

Double Direct Drive Rotary High Vacuum Pump

Model: IVP 150

Capacity: 150 LPM with 0.33 HP Single Phase Motor

Pumping Speed : 9m³/hr

Rational Speed : 1400 RPM

Ultimate Vacuum :5x10(-3) m bar at pump mouth with GB Closed

Ultimate Vacuum :5x10(-2) m bar at pump mouth with GB open

Oil Capacity : 1.0 Lts

Weight : 30 kgs

VACUUM MEASURING GAUGES

Stabilized Digital pirani gauge model: IVPPRG 001 with Two Pirani gauge heads is provided to independently monitor the roughing (chamber) and backing pressure. Vacuum is the chamber or pipe line can be seen on the gauge display using a selector switch. This pirani gauge can measure vacuum level from 0.5 m. bar to 0.0001 m. bar.

SPECIFICATION FOR 1 KW DC POWER SUPPLY

Input Voltage	: 230V +/- 10%, 50Hz, Single Phase AC.
Output Voltage	: 25V to 1000V DC Continuously Variable.
Voltage Adjustment	: A single multi turn Course Controls.
Output Current	: 100 mA.
Current Adjustability	: Through internal pot.
Output Line regulation	: +/- 1%
Output Load regulation	: +/- 1%
Ripple	: 1% RMS.
Noise	: 2% RMS.
Display	: Individual 3 Digit DPM to monitor O/p voltage & O/p current.
Protection	: Protected against Output Over Load And Short circuit.
Operating Temperature	: 5 DEG C to +50 DEG C.
Dimensions (+/- 10mm)	: 450mm(W) X 170mm(H) X 470mm (D) (for 25 – 1000V @ 100 mA)
Cooling	: Forced air cooling.

1. Prices should be FOB (your international airport), CIP New Delhi, and IIT-Kanpur including Packing and Forwarding, Insurance and freight.
2. Prices should include the installation cost.
3. Warranty should at least be for three years after installation.
4. Validity of quotation should be at least for 90 days.
5. Maximum educational discount
6. Any other charges from your side.
7. User list of this equipment (please give complete address)
8. Proprietary certificate, if any
9. Authorization letter from your principal
10. Agency commission, if any

You will be informed accordingly by appropriate authorities if your bid is accepted. Please do not make unnecessary and unsolicited phone calls and emails (except to seek a clarification for the tender), you will be contacted as per need.

Kindly mention **ME /KKK/02/2015-16 Dated: July 15, 2015** on sealed envelope carrying quotation and printed literature and send your best offer (Technical & Commercial, separately) so as to reach us on or before August 15, 2015 to the following address-

Prof. Kamal K. Kar,
Department of Mechanical Engineering
Room # 203 ACMS
IIT Kanpur – 208016 India,

Email: kamalkk@iitk.ac.in