

QUOTATION FOR SUPPLY OF Vacuum Accessories

Quotations are invited for the supply of following **Vacuum Accessories** (specifications attached). Please submit a duly completed quotation (validity period should be at least 90 days), on or before: **August 18th 2017.**

To: Principal Investigator of NRC Grant 16-012
Dr. G.D.K Mahanama

Address:

Department of Physics
University of Ruhuna
Matara
81000
Sri Lanka

E-mail: mahanama@phy.ruh.ac.lk

Vacuum Accessories

- | | |
|-----------------------------------|--------------------------|
| 1. Diffusion Pump | 9. Clamps |
| 2. Rotary Pump | 10. Filters |
| 3. Bell Jar | 11. Vacuum Power Rods |
| 4. Pressure Gauges | 12. Tungsten Wires/Boat |
| 5. Power supply for evaporator | 13. Diffusion/Rotary oil |
| 6. Deposition monitor and Control | |
| 7. Vacuum Valves.(ISO-KF) | |
| 8. Gaskets/'O'rings | |

In the quote clearly indicate the following,

1. The CIF (ie. Cost, Insurance and Freight) value of the product.
2. Your bank SWIFT code for funds transfer.
3. If any bank fees related to payments are taken care by your company.
4. Period of comprehensive warranty.
5. If shipping costs are covered during the warranty period.

The decision of the NRC Tender Board shall be the final. In the event of item purchase, terms and conditions stipulated by NRC will be applied.

Thank you

Dr. G.D.K. Mahanama (PI- NRC 16-012)
Department of Physics
University of Ruhuna
Matara
SRI LANKA

For specifications please refer the attachment.

Specifications for Vacuum Accessories

Instrument/Chemical	Specifications
1. Diffusion Pump	<ul style="list-style-type: none"> • Displacement: 600 lit/sec • Inlet flange: 178 mm bolted flange • Backing connection: NW25 or 'C' Clamp • Cooling: Water • Fluid capacity: 175 ml • Type of fluid: Santovac 5 • Heater power: 0.85 kW, 240 V, Single Phase
2. Rotary Pump	<ul style="list-style-type: none"> • Displacement (50Hz)- 20.5 m³h⁻¹ /12.1 ft³min⁻¹ • Displacement (60Hz) 25.0 m³h⁻¹ /14. ft³min⁻¹ Speed (Pneurop 6602) 50 Hz • Speed (Pneurop 6602) 60Hz 20.4 m³h⁻¹ /12.1 ft³min⁻¹ • Ultimate vacuum (total pressure)without gas purge 1 x 10⁻³ mbar /7.4 x 10⁻⁴ Torr • with gas purge 1.5 x 10⁻¹ mbar /x 10⁻²Torr withFomblin® 1 x 10⁻² mbar /7.5 x 10⁻³ Torr • Inlet connection NW25 • Outlet connection** Nozzle 15 mm external Ø removable from 3/4 in BSP tapped hole
3. Bell Jar	<ul style="list-style-type: none"> • Borosilicate vacuum bell jar • Measuring 310mm ID x 330mm OD x up to a maximum of 500mm H • With the open end ground and fire polished, fully annealed after manufacture. • Viton 'L' gasket to suit the above
4. Pressure Gauges	<ul style="list-style-type: none"> • Pirani Gauge-(Ex-PRM10K) • Penning gauge-(Ex-CP25K) • CG3 capsule dial gauge.
5. Power supply for evaporator	<ul style="list-style-type: none"> • Number of phase-Single phase/Three phase voltage regulator • Frequency-50/60Hz • input voltage-Single phase220V±10%,Three phase380V±10% • output voltage-Single-phase output 0-250V, • Three-phase output0-430V • Efficiency->90% • Waveform distortion-No additional waveform distortion • Dielectric strength-1500V/1min • Insulation resistant-Single phase>5M,Three phase>2M
6. Deposition monitor and Control	<ul style="list-style-type: none"> • Single Channel Quarts crystal film thickness monitor. • Providing direct digital read out of the film thickness and deposition rate for metal and dielectric films. • Resolution 1Å
7. Vacuum Valves.(ISO-KF 16)	<ul style="list-style-type: none"> • Vent valve • Isolation Valve • Right angle valve • Air inlet valve
8. Gaskets/'O' rings	<ul style="list-style-type: none"> • Type-SC5 • Material - Nitrile

	<ul style="list-style-type: none"> • Size-NW 10,16, 25
9. Clamps	<ul style="list-style-type: none"> • Type-Hinged Clamp • Material-Aluminium • Size-NW 10,16,25,
10. Filters	<ul style="list-style-type: none"> • Type-Foreline trap • Charge -0.1kg • Weight-1kg
11. Vacuum Power Rods	<ul style="list-style-type: none"> • Max.op.temp-150 C⁰ • Rating cont.intermitt-150A 10kV dc • Weight-312g • Leak rate-better than 10⁻⁹ mbar l s⁻¹
12. Tungsten Wires/Boats	<ul style="list-style-type: none"> • Tungsten Coil • Wire x 0.040" Diameter • Molybdenum Top-Hat Oval Dimple • Thickness Size-0.005"
13. Diffusion/Rotary oil	<ul style="list-style-type: none"> • Apiezon grease • Sillicon grease • Santovac 5 • Fomblin Rotary Pump Oil.