

#### INDIAN INSTITUTE OF TECHNOLOGY BOMBAY MATERIALS MANAGEMENT DIVISION Powai, Mumbai - 400076

## PR No. 1000030488

# Rfx No. 6100001304

# **Technical Specifications for Rotary Evaporator System**

### A Rotary Evaporator

- 1. Operating Voltage/Frequency : 220-240V,50Hz
- 2. Heating Power Consumption : 1300W
- 3. It should have Hand Lift
- 4. It should have digital display of rotation speed, bath temperature single Panel
- 5. It should have Rotation Speed between the range 10-280 rpm
- 6. Separate ON/OFF switches for heating bat hand rotation.
- 7. Two separate operating knob with LED ring lights for rotation and temperature.
- 8. Universal single heating bath for oil & water ambient to minimum 210°C and the accuracy of  $\pm 1^{\circ}$ C
- 9. Bath should have over heat protection to cut-off at 5°C above set temperature
- 10. Bath volume should be more than 4Litres.
- 11. Material heating bath: SSAISI316L
- 12. Clamping sleeve for easy removal of vapor tube.
- 13. Ventilation and replenishment valve to be included
- 14. The system should accommodate 50ml to 5000ml with single joint size.
- 15. Condensing Surface should be minimum 1400Cm2
- 16. Instrument should be supplied with 1Lit Evaporating Flask & 1Lit Receiving Flask
- 17. Protection class of panel(Display) should be IP42
- 18. Protection Class for bath should be IP67 to protect from short-circuits and corrosion
- 19. Warranty: 3 Years

#### B Vacuum Pump



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- 1. Two stage chemical resistance diaphragm pump
- 2. Suction capacity should be minimum 2.0 m3/h or better
- 3. Ultimate vacuum should be 7 mbar or better
- 4. Warranty: 3 Years
- 5. CE certification
- 6. Weight: 12.8 kg
- 7. Dimensions (w/d/h): 195mm x 245mm x 310mm

## C Digital Vacuum Controller

- 1. Touch screen Display 4.3" (HMI with built in PLC)
- 2. Display:4.3 Inch
- 3. Dimensions (w/d/h):  $6 \times 5.6 \times 5$  inches
- 4. Keller Sensor (Absolute pressure)
- 5. Upper measuring limit 1080 mbar
- 6. Accuracy of measurement <+- 1mbar
- 7. Integrated Vent Valve (Auto 'n' manual bypass mode)
- 8. Ambient Temperature range (operation) 10 40 deg C
- 9. Cable length of external power supply 1.5m
- 10. control Method Switch ON/OFF Vacuum pump or Vacuum valve based on set vacuum
- 11. Solvent Library available
- 12. One year warranty