# THAPAR INSTITUTE

# OF ENGINEERING & TECHNOLOGY

(Deemed-to-be-University u/s 3 of the UGC Act, 1956)

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Enquiry No.TIET/CS/AG/18-19/18345

Date: October 8, 2018

Sub: Request for Quotation(s) for the supply of Rotary Evapourator with Vaccum Pump

Dear Sir

We shall be grateful if you kindly let us have your lowest quotations for the following materials. THE QUOTATIONS SHOULD REACH THE UNDERSIGNED LATEST BY 17.10.2018 through courier or e-mail accompanied by appropriate illustrative literature/catalogues/pamphlets/technical details, samples and specifications as the case may be. On the quotation envelope/ subject the Enquiry Number & Date should be mentioned on the top of the Envelope/mail subject.

Sr. No.	Item Name	Qty.
1.	Rotary Evapourator with Vaccum Pump	1 Nos
	Specificatoin Sheet Attached: Note: Kindly send the technical & commercial quotes separately. Single quote will not be entertained.	

# The offer sent by you must furnish the following details:

- 1. Name, Make & specifications of each item.
- 2. Cost of the item with MRP.( Treat it mandatory)
- 3. Educational discount if any.
- 4. Validity of quotation should be at least 60 Days.
- 5. GST %.

Regards,

Sd/-

- 6. Delivery FOR TIET, Patiala
- 7. Insurance, Freight & other charges if any.
- 8. Minimum Delivery Period.
- 9. Payment terms. Net 60 days against delivery & satisfactory installation at Thapar Inst of Engg & Tech.
- 10. Guarantee / Warranty Information.
- 11. Also please share your Companies Turnover and Market Share along with the ofer.

Head Commercial

## **Rotary Evaporator**

- All components like Rotary Evaporator, Controller and Recirculating Chiller should be from the same Manufacturer/Company.
- 2. Company/Vender should have local service support and service engineer must attend the complaint within 48 hours.
- 3. Warranty of Rotary Evaporator System should be 2 years from the date of installation. Free Service 36 months

#### Rotavapor

- 1. Vertical condenser for all standard distillations for smallest space with motorized lift.
- 2. Vertical Condenser 1400 cm2 or better
- **3.** Purest results by innovative sealing technology with a new ventilation and replenishment valve as well as new FKM and FFKM vacuum seals
- 4. Auto Lift in case of power loss.
- 5. Evaporating flasks and 2-receiving flask 1000ml and vapour tubes should be supplied with standard ground join NS 29/32,
- **6.** The coupling ring and the flange on the condenser side of the drive should be made of PPS (PolyPhenylene Sulfide), for robustness and with chemical resistance.
- 7. All glassware set should feature GL 10 thread Should have long life graphite filled PTFE vacuum seal With non-sticking quick release vapour tube for easy cleaning, vapour tube should have large bore for fast distillation rates up to 1200 ml ( $H_2O$ )/hour
- **8.** The operating panel should be detachable allowing users of highest level of convenience to control the parameter change outside the fume hood.
- 9. With convenient large dial controls for adjustments of rotation speed from 20 280 rpm
- **10.** With microprocessor controlled heating bath temperature 20° C 210° C with digital display of bath temperature with heating capacity of 1400 W.
- **11.** The heating bath should be adjusted horizontally up to 200mm and should offer efficient space to accommodate evaporating flasks from 50ml to 5000ml
- **12.** Should have 3.5" LCD digital graphic display which should feature all parameters (rotation speed, vapour temperature etc bath temperature.
- 13. Should be offered with Vapour Temperature Sensor.
- 14. Should have process timer which can allow unattended operations
- 15. Should have auto start and stop with just one press of a button
- 16. Heating bath should have non-slip safety handles for safe and easy transport of bath
- 17. Should have over heat cut-off protection at 220° C
- **18.** Heating bath should be constructed of an insulated double wall for user protection against burns and scalding.
- 19. Material of construction of heating bath should 1.4404 / ASIS 316 L (L = Electro-polished)
- 20. Volume of Heating Bath: 4.5 Ltrs
- 21. Set bath temperature on display accuracy: +/- 1° C
- 22. Protection Class: IP 67 Woulf bottle

### Vacuum pump (Quote separately)

Vaccum pump suitable for rotary vacuum evaporation, decompression distillation, vacuum drying,

and vacuum filtering

Oil-free

The membranes of the pump must be chemical resistant.

Maximum vacuum: 13mbar Noise: maximum 50dB Space saving and compact Supply voltage: 230 V

Vacuum tubing for connecting with Rotary evaporator

Supply voltage: 230 V/50 Hz/1phase

#### Electrical Aspirator Pump (Quote separately)

- ✓ Portable dual-channel water-jet aspirator pumps Creating a vacuum by means of venturi effect, aspirator pumps are suitable for rotary vacuum evaporation, decompression distillation, vacuum drying, and vacuum filtering.
- ✓ Built-in circulating pump and water tank make the unit portable.
- ✓ Circulating pump continuously pumps water quietly across a set of aspirators, and is therefore clean and efficient.
- ✓ Built-in check valve prevents backflow of water into the aspirator pump.
- ✓ Corrosion-resistant construction of all wetted parts with 304 stainless steel, polypropylene, silicone, or nickel-coated brass.
- ✓ Water tank features a drain port and a spigot for easy changing of water.

Bath volume (L / cu ft)

9.5 / 0.3

Max. vacuum (Mpa / mmHg)

0.0906 / 680

Free-air capacity

18L / minute (0.6 cfm) x2ea

Material (bath / aspirator)

Polypropylene / Nickel-coated brass

Electrical requirements

120V, 60Hz / 1.4A