

ROTARY VACUUM EVAPORATOR



Material of Construction

- It made of high-quality borosilicate glass (for visibility and chemical resistance) and MS duly powder coated structure for durability.

Modular Design

- Compact, ergonomic design allows easy cleaning, maintenance, and integration with chillers, vacuum pumps, and Other controllers.

Rotating Flask and Motorized Drive

- The main flask (usually round-bottom) is continuously to increase the surface area for evaporation and to ensure uniform heating.
- Equipped with a variable-speed motor for precise control.

KEY FEATURES

Vacuum System Integration

- A powerful vacuum pump reduces the pressure inside the system, significantly lowering the boiling point of solvents.
- This enables rapid solvent removal even for high boiling-point or heat-sensitive materials.

Heating Bath (Water or Oil Bath)

- The evaporating flask is partially immersed in a temperature-controlled bath.
- Provides gentle, uniform heating and can maintain temperatures typically between ambient to 180°C depending on the solvent and bath medium.

Condenser Assembly

- The evaporated solvent vapors pass through a highefficiency condenser (vertical, diagonal,).
- The cooling coil (circulating cold water or coolant) condenses vapors into liquid form for collection in the receiving flask.

Receiving Flask

- Collects the condensed solvent for recovery, recycling, or disposal.
- Constructed from borosilicate glass for chemical resistance and visibility.

Digital Display and Control

- It include a digital temperature display, vacuum gauge, and speed controller.
- Allows precise control of bath Temperature, rotation speed.

Safety Features

- Over-temperature cut-off, vacuum release valve, and PTFE seals to ensure safe operation.
- Automatic lift mechanism raises the flask from the bath when power is cut off, protecting samples from overheating.

TECHNICAL MATRIX

Model No	PTE-RE-316 A	PTE-RE-316 B	PTE-RE-316 C	PTE-RE-316 D	PTE-RE-316 E	PTE-RE-316 F
CAPACITY	1 litre	2 litre	3 litre	5 litre	10 litre	20 litre
Operating Principle	Vacuum-assisted evaporation with rotating flask					
Vacuum Level	Typically up to 2–20 mbar (depending on pump)					
Sealing	Teflon Rubber					
Rotation Speed	20 to 300 RPM					
Lifting Method	Automatically (Optional)					
Control Mode	Knob and Keypad Control					
Display	LED/LCD Display					
Bath Temperature Range	Ambient above +5°C to 180°C					
Accuracy	±1 °C					
Condenser Type	Vertical / Diagonal					
Heating Load	500 Watt-2 Kilowatt					
Supply	220/230 Volts 50 Hz AC Supply					
Applications	Solvent removal, purification, concentration, extraction, drying					
Advantages	Faster evaporation, high solvent recovery, safe for heat -sensitive samples					

OPTIONAL - ADD ONS

- Vacuum Pump
- Recirculating Chiller
- Automatic Flask Lifting System
- PTFE-coated Glassware