

Rotary evaporators

Introduction

- Simple, counterbalanced lift mechanism
- PTFE/glass liquid pathway for chemical inertness
- Sparkless induction motor
- Long life graphite impregnated PTFE vacuum seal
- Efficient flask and vapour tube ejection system

Rotary evaporators are distillation units that incorporate an efficient condenser with a rotary flask system. As the flask containing the solvent is rotated it continually transfers a thin layer of liquid over the entire inner surface. This gives a very large surface area for evaporation that is effected by heating from the accessory waterbath (see page 94).

They are the ideal tools for many everyday laboratory applications including:-

- Concentration of solutions
- Reclamation of solvents
- Vacuum drying of wet solids
- Degassing liquids

The rotating system is fitted with a special seal that allows the apparatus to be placed under vacuum. This reduces the boiling point of the solvents and removes the vapour phase making the process much more efficient.

See page 95 for details of the vacuum pump.

Each unit is also provided with an easy to use vacuum release and a continuous feed system, which allows more solvent to be drawn into the rotating Florentine flask without the need to stop the operation. There are three patterns of condenser available depending on the application and space available (see page 91 for full list of components included in each set).

- Rotary evaporator with diagonal glass condenser for standard distillations.
- Rotary evaporator with vertical glass condenser for distillation of solvents with higher boiling points. 20% narrower than RE300 saving space.
- Rotary evaporator with cold finger glass condenser for use with ice or dry ice for volatile or low boiling solvents. No cooling water required. Unique drain to empty the large 1 litre trap very easily.

For each condenser pattern, there is also a plastic coating option for extra safety when using the glassware under vacuum. It acts as a safety screen, contains the glassware pieces and gives the operator sufficient time to transfer any potentially dangerous chemicals to a suitable vessel without spillage.

See page 135 for guide to solvent evaporation temperatures.



RE300 and RE300DB

Rotary evaporators

Introduction

Glass set 00

Diagonal coil condenser, vapour tube for diagonal condenser, receiving flask 1000ml, Florentine flask 1000ml, feed tube with stopcock, vacuum seal, conical joint clip, spherical joint clip.

Glass set 01

Vertical coil condenser, vapour tube for vertical condenser, receiving flask 1000ml, Florentine flask 1000ml, feed tube with stopcock, vacuum seal, conical joint clip, spherical joint clip.

Glass set 02

Cold finger condenser, drain for cold finger condenser, vapour tube for cold finger condenser, receiving flask 1000ml, Florentine flask 1000ml, feed tube with stopcock, vacuum seal, conical joint clip, spherical joint clip.

Glass set 00P

Diagonal coil condenser plastic coated, vapour tube for diagonal condenser, receiving flask 1000ml plastic coated, Florentine flask 1000ml plastic coated, feed tube with stopcock, vacuum seal, conical joint clip, spherical joint clip.

Glass set 01P

Vertical coil condenser plastic coated, vapour tube for vertical condenser, receiving flask 1000ml plastic coated, Florentine flask 1000ml plastic coated, feed tube with stopcock, vacuum seal, conical joint clip, spherical joint clip.

Glass set 02P

Cold finger condenser plastic coated, drain for cold finger condenser, vapour tube for cold finger condenser, receiving flask 1000ml plastic coated, Florentine flask 1000ml plastic coated, feed tube with stopcock, vacuum seal, conical joint clip, spherical joint clip.

Technical Specification

Speed range	20 to 190rpm
Vacuum	< 1 mmHg
Lift distance	150mm
Dimensions, mm (w x d x h)	385 x 335 x 470-610 (excluding glassware)
Electrical supply	220V-240V, 50/60Hz, 50W
IP Rating	30

Ordering Information

Model	Description
RE300	Rotary evaporator complete with glass set 00
RE301	Rotary evaporator complete with glass set 01
RE302	Rotary evaporator complete with glass set 02
RE300P	Rotary evaporator complete with glass set 00P
RE301P	Rotary evaporator complete with glass set 01P
RE302P	Rotary evaporator complete with glass set 02P



RE301 and RE300DB



RE302 and RE300DB