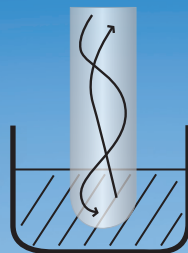


HyperVap™, HV-300



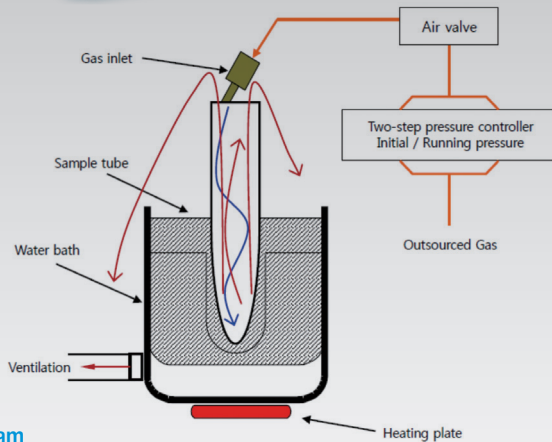
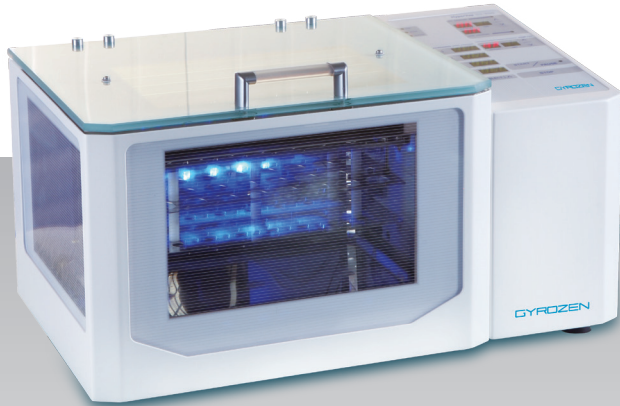
The ScanVac- HyperVap™ Concentrator is an efficient, automated “nitrogen blow-down” system that achieves sample concentration by the injection of a controlled flow of inert gas into multiple sample tubes, whilst simultaneously controlling the sample(s) temperature. The entire concentration process can be programmed and controlled automatically with settings for the volume and flow rate of the gas, the temperature and the time for each cycle.

Capable of handling up to 32 samples, ranging in size from 6 to 300 m/s with different solvents and any combination of volumes, the ScanVac-HyperVap™ offers true flexibility in sample preparation and increased recovery rates.

GYROZEN

Principle

Nitrogen/ Air blow-down concentration accelerates the evaporation of a liquid by decreasing the partial vapour pressure of the solvent just above the liquid interface. This removes molecules in the vapour state, prevents their return to the liquid phase, thus greatly increasing the rate of evaporation.



Diagram

- Semi-helical Gas/Air flow via specially designed nozzles, generates a large surface area, to maximise the rate of evaporation
- Air or N_2 at a set pressure is continuously injected via a nozzle and corresponding valve gas line
- Air or N_2 blows down from the nozzle to the bottom of the sample tube, creating "vortex" thereby increasing the surface area, thus the rate of evaporation
- Evaporated solvents are evacuated by the internal extract fan



Features & Benefits

- Four Independent Timer Settings for Gas Injection Channels, each with 3~8 nozzles, allows each channel to be controlled separately, allowing different volumes and solvents to be evaporated simultaneously
- Two Step Control of Gas/Air Injection pressure/time, allows both initial and running pressure to be altered on a time base. This allows a gradual change of pressure to prevent “bumping” of the sample on start up
- Semi-helical Gas/Air flow via specially designed nozzles, generates a large sample surface area, to maximise the rate of evaporation
- Temperature control of the water bath from ambient to 99°C
- Status monitoring incorporating “traffic light” indication for heater, ventilation/extract fan and door closure. When all is OK the light is yellow, if there is malfunction or set is incorrect the corresponding light is red
- Blue back-lighting to the sample chamber gives excellent definition for viewing the samples via either front or side windows. The light is on/off controlled by a separate switch on the back
- Rear mounted extract/ventilation fan for rapid exhaust of gas/vapours (connection to duct exhaust via fume hood)
- Tempered glass panels to chamber front, left side and top lid
- Drain valve & hose for easy replacement of bath water
- Diverse range of sample racks catering for various sample containers

HyperVap™, HV-300

Technical Specifications

Sample Capacity	
Number of samples	6~32
Sample volume	5 mL ~ 300 mL
Pressure	
Operating gas pressure	15~50 psi
Pressure control	Automated 2 step control (initial & operating pressure)
Time length of initial pressure	~99 min
Gas	Compressed air, Nitrogen, etc
Time control	~999 min (4 independent)
Water bath temperature	~90°C
Forced evacuation of vapor gas	Yes (by fan)
Power	220 VAC, 350 VA max
Dimension (mm)	590(w) x 340(d) x 320(h)
Weight	26.5 kg

Ordering Information

Part No.	Description	Unit
HV-300 Concentrator consists of a main system, a tube rack and a pack of nozzle caps		
300101	Concentrator consists of a main system (4 x 8 nozzle) & a tube rack for 24 x 120 mm tubes	set
300103	Concentrator consists of a main system (3 x 6 nozzle) & a tube rack for 30 x 120 mm tubes	set
300105	Concentrator consists of a main system (3 x 5 nozzle) & a tube rack for 38 x 140 mm tubes	set
300110	Concentrator consists of a main system (2 x 3 nozzle) & a tube rack for 72 x 140 mm tubes	set
300115	Concentrator consists of a main system with customized nozzle assembly and tube rack	set
7.008.300.100		
960201	Nozzle Assembly, 4 x 8 (32 positions)	set
960202	Nozzle Assembly, 3 x 6 (18 positions)	set
960205	Nozzle Assembly, 3 x 5 (15 position)	set
960206	Nozzle Assembly, 2 x 3 (6 position)	set
96020S	Customized Nozzles Assembly	set
970250	Nozzle caps, 8/pk	pk
Tube Rack		
980101	Tube Rack for 24mm x 120mm tubes (32 positions)	ea
980102	Tube Rack for 15mm x 70mm tubes (32 positions)	ea
980103	Tube Rack for 30mm x 120mm tubes (18 positions)	ea
980105	Tube Rack for 38mm x 140mm tubes (15 Positions)	ea
980107	Tube Rack for 15mm x 120mm tubes (32 Positions)	ea
980109	Tube Rack for 16mm x 100mm tubes (32 Positions)	ea
980110	Tube Rack for 72mm x 140mm tubes (6 Positions)	ea
98010S	Customized Tube Rack	ea