

Specifications

Dimensions: 26"W x 15" D x 18" H
Weight: 82 lbs

Requirements

Power: 120/240 VAC
Vacuum: 25 inches of Mercury
Spurge Gas: Nitrogen at 50-60 psig

Construction

All wetted metal parts are Sulfinert® coated
All PEEK and PTFE tubing and valves

Evaporation Rates

Acetone	.4.9 ml/min
Acetonitrile	.2.8 ml/min
Ethyl Acetate	.4.1 ml/min
Ethyl Ether	.11.7 ml/min
Hexane	.7.4 ml/min
Methanol	.2.5 ml/min
Methylene Chloride	.6.5 ml/min
Petroleum Ether	.12.5 ml/min

Part Numbers for Ordering

DryVap Concentrator System	50-0916
Concentrator Tubes (6)	03-1801
Concentrator Tube Rack	01-1963

Optional Items

225 ml DryDisk™ Assembly for 65 mm Membranes	50-0914
DryDisk 65 mm Membranes (box of 50)	40-705-HT
20 ml DryDisk Barrels for ≤ 20 ml Samples (bag of 50)	40-856-HT

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DryVap™
Concentrator System

Set Your Evaporation to Autopilot!



Fully Automated Concentrator System

The first fully automated system to combine solvent drying and rapid solvent evaporation through combined vacuum, heat, and sparge gas with a gentle final stage nitrogen blow down to 0.9 mL ... **ALL UNATTENDED!**



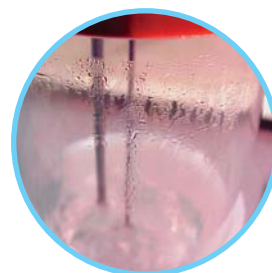
Processing samples for GC/GC-MS analysis is now as simple as 1-2-3!



1 Stage 1: Solvent Drying

The DryVap™ Concentrator System is the first unit to incorporate an optional in-line drying feature. Utilizing Horizon's patented DryDisk™ Separation Membrane technology the operator can rapidly dry a liquid sample "in-line" by simply utilizing the built in port for each evaporation tube.

- Eliminates using Sodium Sulfate
- Retained residual water can be re-extracted yielding improved recoveries
- Utilizes vacuum to increase drying process
- If you do not wish to use this feature – simply pour dried solvent/sample into a DryVap tube for evaporation



2 Stage 2: Rapid Solvent Evaporation

The DryVap Concentrator is designed to emulate the traditional KD (Kuderna-Danish) method that is considered the benchmark for evaporation. DryVap is the only automated system that will induce a condensation inside the evaporation vessel (similar to KD) to enhance recoveries of the "light ends" [alkyl C8 to C12]. The sample is constantly being mixed, resulting in a more consistent evaporation process. A constantly mixed sample improves the reproducibility between sample to sample.

- Independent evaporation tubes to eliminate vapor induced cross contamination
- Completely sealed tubes that prevent sample loss
- Controllable 60W immersion heater vs external water bath or block for efficient evaporation and faster equilibrium
- Embedded thermocouple and proprietary algorithm automatically turn off heater when entering the blow-down state
- 5 selectable automatic rinse methods to enhance sample recovery
- Fully automatic operation that is reliable and can be optimized for speed or recoveries



3 Stage 3: Gentle Nitrogen Blow Down

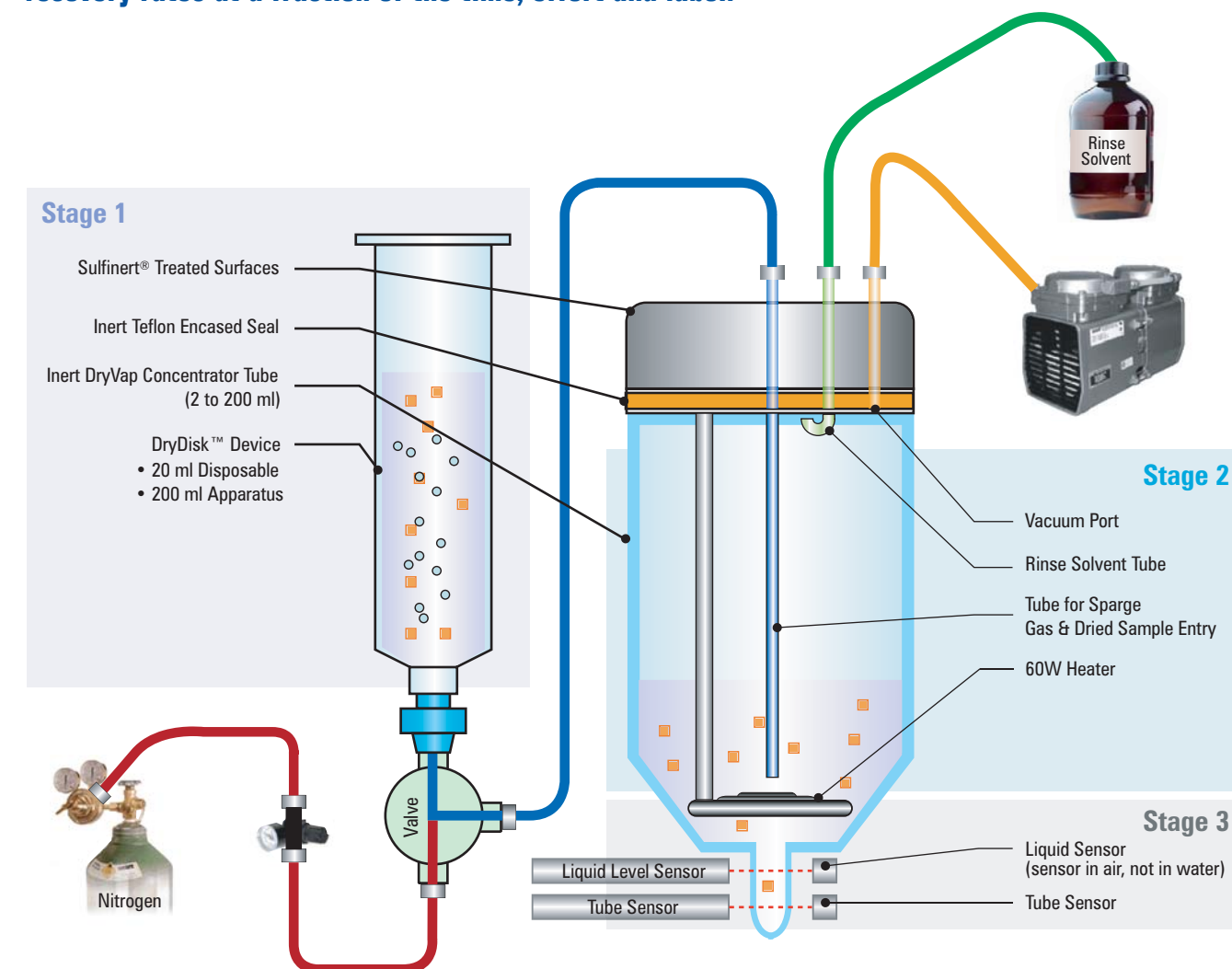
The DryVap Concentrator incorporates a gentle nitrogen sparge that is introduced near the bottom of the vessel to perform the gentle blow down to the end point.

- Eliminates manual nitrogen blow down step
- Liquid level sensors automatically terminate run when 0.9 ml is reached
- Sample is preserved under N₂ blanket, until user is ready to transfer sample

DryVap™
Concentrator System

New and Revolutionary

High performance concentrator delivers superior analyte recovery rates at a fraction of the time, effort and labor.



DryVap™ Data Comparison Recovery Data of Phenolic Compounds

Compounds	KD Tube Attended Operation (% Recovery)	DryVap™ Unattended Operation (% Recovery)
Phenol	91.9	95.5
2 Chlorophenol	89.2	92.0
2 Methylphenol	91.9	94.0
3 Methylphenol	90.4	92.5
2 Nitrophenol	92.4	98.2
2,4 Dimethylphenol	91.7	93.0

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