

(An ISO 9001: 2008)

## **Dry Evaporator Automated Drying & Concentration System**



Dry Nitrogen Evaporator Advance Dry Block Nitrogen Sample Evaporator for 50 Samples each of maximum 30 ml volume with timer microprocessor controlled Dry Block with adjustable temp. as well as timer for purging Nitrogen Gas with individually controlled sample concentration & pressure gauge.

It is fully microprocessor controlled and Nitrogen Dry Heat , Temperature, gas station, more advantage LCD display, over Temp. Heater ON/OFF LED, door open display, high temperature Thermal Contour for safety for best quality and best performs.

Athena Nitrogen Evaporator - Evaporation Systems are multiple-sample evaporators that use a combination of gentle forces — vortex motion and dry heat with nitrogen blow down — to quickly reduce samples to dryness or an end point volume. Athena Nitrogen Evaporator Vertex Dry Evaporators use dry heat and nitrogen blow down to speed evaporation of up to 50 small samples at once. Unlike water bath heaters, dry block heaters require less maintenance, no distilled water or additives, and adds no potential source of contamination.

### Automated Solvent Drying, Solvent Evaporation And Sample Concentration Dry Evaporator Automated Drying And Concentration System Nitrogen Concentrator Blow Down Evaporator (dry Type)

The Technology Dry type Concentrator System automates the drying, evaporation, and concentration of organic extracts prior to chromatographic analysis, combining what were once manual steps into one automated process. Unattended operation frees up laboratory personnel for other tasks and eliminates variability between chemists' techniques, producing superior and consistent results. When equipped with the Dry type Separation Membrane option, the Dry type Concentrator System can dry and concentrate samples in under 30 minutes -- increasing the sample throughput of your lab.

For environmental applications the Dry Evaporator Concentrator System dries and concentrates organic extracts prior to GC and GC/MS analysis. The Concentrator System uses a unique combination of vacuum, heat, and nitrogen spurge gas to rapidly evaporate and gently concentrate extracts down to a precise desired volume.

For Biopharmaceutical, pharmaceutical, and other applications the Dry Evaporator Concentrator System removes residual solvents from your compound in far less time than traditional evaporation methods. Through the precise application of vacuum, heat and nitrogen spurge gas, The Dry Evaporator Concentrator System gently and predictably evaporates all residual solvent from your compound so you can quickly move on to the next step.



### **Product Specifications:**

- Compact Size Table top Model.
- Precise manufacturing using latest technology -Water Jet Cutting & CNC fabrication
- High Quality Pressure Gauge from Wika.
- Side Handles for easy movement
- SS 316 tank & Nozzle Manifold for durability and maintenance free
- Best Quality powder coating for great looks & to avoid rusting
- Dry Block Heating, No Water required
- 600 watt dry block heating system
- Specially Designed Aluminum block for fast & uniform heating
- No Bacterial fungal Growth, No cleaning required
- Tank & Body gap is well insulated with imported Glass wool Sheet to avoid heat loss.
- Digital LCD Display
- Auto Cut off with precision sensor for Time, temperature & gas flow
- Best quality Pneumatic Fitting from Janatics & Parker operation
- Efficient & adjustable ventilation with Built-in exhaust fan with blower
- 2mtr 1.5 "ID Polyethylene Exhaust hose for easy ventilation
- 4mm Flexible Transparent gas Path Tubing
- Snap fitting 8mm OD Flexible Polyethylene Tubing for nitrogen supply
- 5 Nitrogen Control valves with ON/OFF Switches
- 50 nitrogen –dispending nozzle in five horizontal rows
- Self glowing Power ON /OFF Switch
- Automated Solvent Drying, Solvent Evaporation And Sample Concentration
- Evaporation Medium : Nitrogen & dry Heat (using block)
- Fast evaporation

- Microprocessor-controlled vortex motion increases surface area for faster evaporation.
- Maintenance-free, microprocessor-controlled motor provides smooth variable-speed power to drive the vortex motion.
- Audible alarm with automatic shut down for timed end point
- Audible/visual alarm for end point detected by temperature sensors at heater and block..
- All mechanical components are isolated from the chemical fumes and vapors for longer life.
- Time Range: 15 sec to 10 hours
- Time Set-up / down arrow keys (15 sec increments)
- Temperature range: Ambient to 100 °C (thermal cutout for safety)
- Temperature set-up / down arrow keys (1 °C increment)
- Start/stop: Green LED indication when process is On
- Gas stations : 5 Nos. with LED indication
- Gas regulator range: 0 to 100 PSI (approx) \* Pressure gauge range: 0 to 100 PSI
- Controlled : Fully Microprocessor based
- Sample capacity: 50 Nos.
- Dimensions:  $30cm(H) \times 40cm(W) \times 55cm(L)$  Weight: 30 Kgs
- Power supply: 230 V AC / 3Amp 50 Hzs \*Error indication: LED indication with Buzzer
- Easy ON/OFF switches to turn Nitrogen Flow on or off to the nozzle above the sample vials

#### **RACK SPECIFICATION:**





Gas Line: 5 Nos.

Rack Type OD X Length	Working Volume	Type of Test Tube
1) 12 mm x 75 mm	04 ml	Round Surface
2) 12 mm x 100 mm	05 ml	Round Surface
3) 15 mm x 125 mm	11 ml	Round Surface
4) 15 mm x 150 mm	12 ml	Round Surface
5) 16 mm x 100 mm	10 ml	Round Surface
6) 17 mm x 150 mm	16 ml	Round Surface
7) 17 mm x 125 mm	15 ml	Conical
8) 18 mm x 150 mm	20 ml	Round Surface
9) 20 mm x 150 mm	30 ml	Round Surface

# ATHENA TECHNOLOGY

Office 802, Hercules, Lodha Paradise, Majiwada, near Majiwada Flyover – Thane (W) Mumbai 400 601 INDIA

**Web**: <u>www.athenatechnology.co.in</u>, <u>www.athenatechs.in</u> & <u>www.nitrogenevaporator.in</u> **Contact**: +91 97690 47445, +91 8879902481, +91 9619067770 & Tel: 022 25364439

Email: milan@athenatechnology.co.in , info@athenatechnology.co.in technology.athena@gmail.com



