

**aircel**  
**AEHD 500**

460VAC/60Hz - 500 scfm desiccant air dryer



The nano aircel brand twin tower externally heated desiccant air dryer provides clean dry air for a wide range of industrial applications. These dryers use an electric heater to heat a small amount of dry purge air for regeneration to increase efficiency and reduce the amount of purge air required. For consistent performance and cost-effective operation, these dryers are an excellent choice.

general characteristics	
rated capacity (scfm) <sup>(1)</sup>	500
regeneration air (scfm) <sup>(2)</sup>	40
half cycle time (hours)	4
dryer pressure drop (psid)	5
operating limits	
min/design/max operating pressure (psig)	60 / 100 / 150
outlet dew point at design conditions (°F)	-40
min/design/max inlet temperature (°F)	38 / 100 / 120
system components	
inlet air filter	coalescing filter with 0.01 µm element
after filter	high temp particulate filter with 1 µm element
condensate drain	zero-loss electronic drain
inlet valve(s)	automatic piston valve
purge exhaust valves	angle seat valve
desiccant chambers	
desiccant type	activated alumina
desiccant weight per vessel (lbs)	228
desiccant vessels	ASME Section VIII Division 1, "U" stamped, 200 PSIG at 450 °F
controls/design	
dryer design	PSA externally heated regenerative dryer
power supply (V/Ph/Hz)	460/3/60
full load amps	9.3
controller type	programmable logic controller (PLC) in NEMA 4 enclosure
energy management system	dew point control standard
heater absorbed power (kW)	7
insulation <sup>(3)</sup>	heater shell and hot air piping protected
air circuit	
air circuit connections (NPT(F))	2"
ISO class	
ISO air quality class (water content)	class 2 (-40°F pdp)

(1) in compliance with CAGI (ADF 100) / NFPA (class H): inlet temperature 100°F, ambient temperature 100°F, inlet pressure 100 psig, pressure dew point -40°F. For all other conditions, contact support@nano-purification.com

(2) based on a timed cycle at full flow

(3) vessels by customer

(4) specifications subject to change without notice

nano-purification solutions  
 Charlotte, North Carolina  
 United States

nano-purification solutions TN  
 Maryville, Tennessee  
 United States

nano-purification solutions Canada  
 St. Catharines, Ontario  
 Canada

nano-purification solutions Ltd.  
 Gateshead, Tyne and Wear  
 United Kingdom

nano-purification solutions GmbH  
 Erkelenz, Germany

nano-purification solutions Asia Pacific  
 Singapore

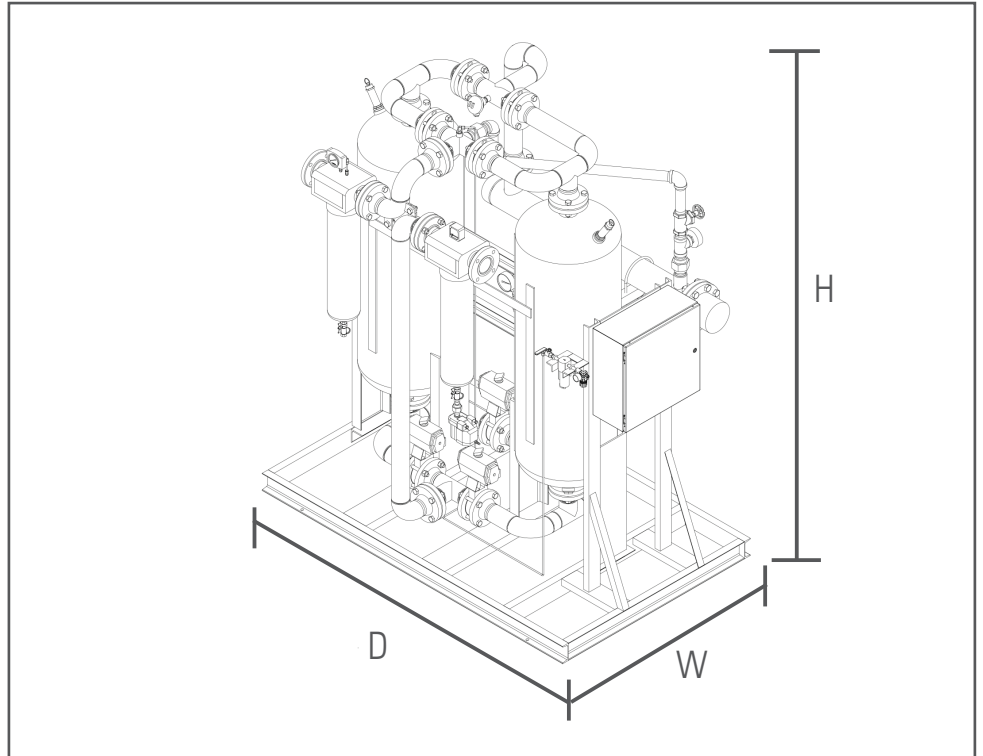
Tel: 704.897.2182  
 Fax: 704.897.2183  
 Email: support@nano-purification.com

## technical specification

### dimensions & weight

width (in)	53
depth (in)	66
height (in)	87
weight* (lbs)	2300

\*desiccant is included in total weight. Units 2500 scfm and above desiccant is shipped loose



## features

- made in the USA
- rugged steel frame
- UL/cUL compliant
- ASME U-stamped pressure vessels
- dew point control
- pre and after filters included as standard
- Allen-Bradley PLC controller
- NEMA 4

experience