



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) ⁽¹⁾	500
regeneration air (scfm) ⁽²⁾	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 ⁽³⁾	heater shell and hot air piping protected

air circuit

air circuit connections (NPT(F))	2"
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ISO class

ISO air quality class (water content)	class 2 (-40°F pdp)
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(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

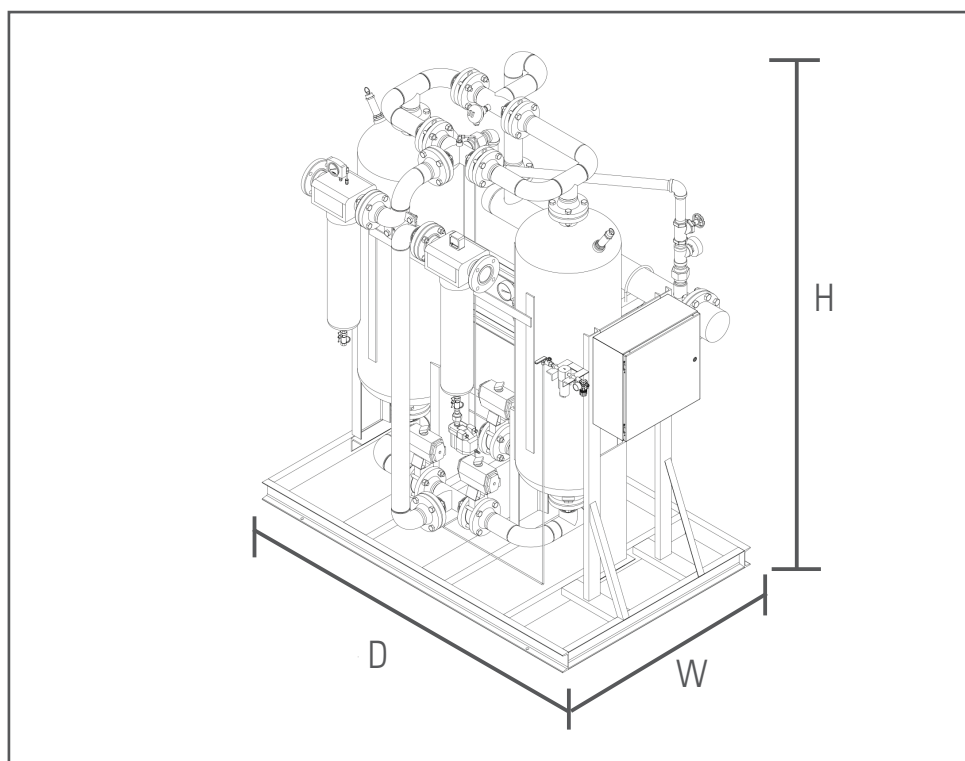
Tel: 704.897.2182
Fax: 704.897.2183
Email: support@nano-purification.com

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