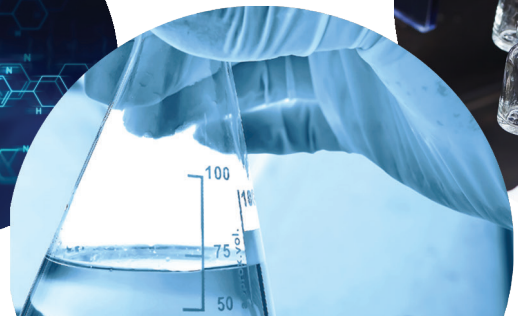




nano



L¹CO₂ adsorption dryers

flow capacity: 1.5 - 120 l/m



CO₂ removal adsorption dryer

flow capacity: 1.5 - 120 l/m

L¹

Leading edge technology and hundreds of years of **experience**... nano-purification solutions, your world-class manufacturer of state-of-the-art compressed air and gas solutions to industry.

Our commitment at nano is to work alongside our **customers** and provide unique solutions with the highest quality products to solve your specific challenges.

A wealth of experience and leading edge products are only part of the equation. nano recognize that world-class customer **service** is the most important component to any successful business.

Experience. Customer. Service... **nano**



clean and dry

Clean and dry compressed air is essential in every efficient and profitable manufacturing and process operation worldwide. nano's vast experience includes food, beverage, chemical, laboratory, medical and natural gas applications.

nano understands your needs and has created the nano range of high-performance, energy-saving compressed air purification products to provide clean and dry compressed air and gases at an affordable price with unrivaled reliability.



design

Our experienced team of design engineers are always looking for new and unique technologies and products to bring you the highest level of performance and lowest overall operating cost.



research & development

Our R&D team endeavor to provide solutions that go beyond developing an existing product. They are continually researching new technologies which can provide unique advantages over competitive offerings.



manufacture

The reliable and energy saving nano L¹ range of CO₂ removal adsorption dryers are manufactured in our state-of-the-art facility to the highest standards of build quality to ensure equipment reliability and high levels of performance.

CO₂ removal system

Why buy purge gas in a high pressure cylinder when you can generate your own, more easily, reliably and cost effectively using a CO₂ adsorption dryer?

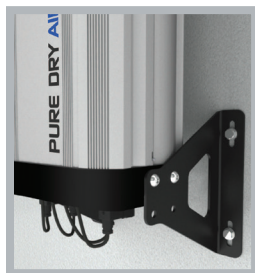
The nano L1 range of CO₂ adsorption dryers are small, simple and can be wall mounted right in your laboratory. Connect them to your existing compressed air system to deliver a continuous supply of clean, dry and CO₂ free purge gas without any of the hassle of traditional cylinders. Ideal for laboratory applications including FTIR purge, TOC purge, NMR, GC flame gas and laser purging, these systems eliminate the interruptions, recalibrations and safety concerns associated with high pressure oxygen and nitrogen cylinders.

Developed with the laboratory in mind, nano L1 dryers require no bench space and the innovative exhaust silencing system ensures incredibly quiet operation. Using proven pressure swing adsorption (PSA) technology, the units feature automatic regeneration and advanced purification cartridges with integral pre and post filtration providing totally clean, dry air with a CO₂ level of less than 1 ppm.

It's time to bring your purge gas supply into the 21st century. There is no better solution for your laboratory purge gas needs.



benefits



mount on the floor or the wall



PLC controller with clear text display



performance validated nano F1 filtration



easy to remove and install replacement desiccant cartridges

guaranteed performance

- nano CO₂ adsorption dryers provide the highest standard of performance
- 100% function and performance tested at our factory
- 1 year warranty

increased efficiency

- a constant supply of high air purity eliminates interruption of analyses (to change cylinders) and reduces the amount of instrument re-calibration required

lower running costs

- producing CO₂ free air from an existing compressed air supply is significantly cheaper than using cylinder supplies

simple installation

- novel exhaust air silencer significantly reduces noise levels (<dBa)

easy to maintain

- less than 15 minutes required for maintenance
- unique factory built filtration and adsorption cartridge makes servicing simple

sizing & specifications

model	recommended filtration	inlet & outlet	inlet air flow ⁽¹⁾		outlet gas flow ⁽¹⁾		dimensions (ins)			approx. weight
	part number	NPT (f) ⁽⁴⁾	ft ³ /h	l/m	ft ³ /h	l/m	A	B	C	lb
NDC 015	NFD 25	3/8" PTC	5.3	2.5	3.2	1.5	17	9	10	19.9
NDC 050	NFD 25	3/8" PTC	17.6	8.3	10.6	5.0	17	9	10	19.9
NDC 140	NFD 25	3/8" PTC	53	25	32	15	17	9	10	19.9
NDC 300	NFD 25	3/8" PTC	106	50	64	30	25	9	10	29.8
NDC 600	NFD 25	1/2" PTC	212	100	127	60	43	9	13	56.2
NDC 900	NFD 50	1"	318	150	191	90	29.3	16.8	11.1	103.6
NDC 1200	NFD 50	1"	424	200	254	120	29.3	16.8	11.1	103.6

specifications

design operating pressure range	58 to 174 psig
recommended operating temperature range	59 to 68°F
power supply requirements	50 or 60 Hz, 100 to 240 VAC
maximum noise level (during depressurization)	60 dBA
manufacturing quality standards	ISO 9001.2015 & CE

outlet gas quality

	standard	optional
maximum CO ₂ content	1 ppm	-
maximum pressure dew point	-94°F	-
maximum particulate size	1 micron	0.01 micron ⁽²⁾
maximum oil content	-	0.0003 ppm ⁽³⁾

pressure correction factors ⁽⁵⁾

inlet air pressure (psig)	4	5	6	7	8	9	10	11	12
correction factor	0.63	0.75	0.88	1	1.13	1.25	1.38	1.50	1.63

temperature correction factors ⁽⁵⁾

inlet air temperature (°F)	7	95	104	113	122
correction factor	1	1	0.97	0.88	0.73

(1) at 100 psig inlet pressure and 68°F and up to 375 ppm CO₂ For outlet flow at all other conditions contact support@n-psi.com

(2) requires addition of a nano M01 particulate after filter at the outlet

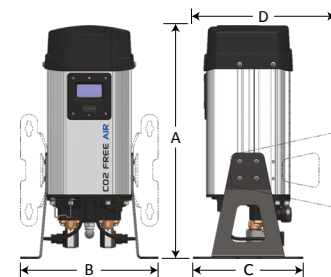
(3) requires addition of a nano M01 coalescing pre filter and an AC activated carbon filter at the inlet. Recommended for compressed air systems using an oil flooded compressor

(4) NDC 015 to NDC 600 have push to connect fittings on the inlet and outlet. All other models have NPT threaded connections

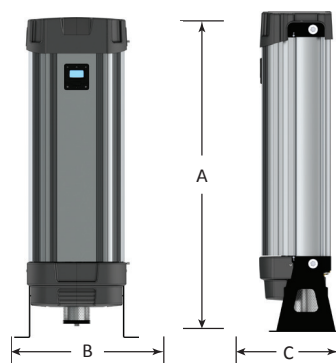
(5) to be used as a rough guide only. All applications should be confirmed by nano. Contact support@n-psi.com for further assistance

(6) NDC 900 to NDC 1200 - noise level is 80 dBA

- service guidelines**
- desiccant cartridges should be changed every 2 years
 - valves should be changed every 4 years
 - refer to user guide for full service details



NDC 015 to 600



NDC 900 & 1200

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