

snowstorm
filled

nano



V¹ oil vapor removal system

flow capacity: 185 - 1500 scfm (315 - 2550 Nm³/h)



oil vapor removal system

V¹

flow capacity: 185 - 1500 scfm (315 - 2550 Nm³/h)

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 under 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 V¹ range of oil vapor removal systems 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.

oil vapor removal system

The nano NVR range of oil vapor removal adsorbers has been designed to reduce oil vapor and odor from any compressed air system. The activated carbon towers will, by the use of adsorption, reduce residual oil content to lower than 0.003 mg/m³ at 95°F and 100 psi inlet pressure.

The NVR has been designed to deliver air quality to ISO8573-1 (class 1 for oil) at 122°F and 232 psig inlet conditions when used in conduction with nano water separators, coalescing filters and compressed air dryers.

Manufactured from high quality extruded aluminum, the modular construction design maintains effective operation for air quality for a minimum of 12⁽³⁾ months operation. Its unique design ensures a low differential pressure for highly efficient and economical operation.

The nano NVR range utilizes a unique adsorbent filled activated carbon cartridge complete with integral diffusers and built-in 1 micron dust filter as standard.

benefits - odor free



air quality performance

- when matched to inlet conditions, the adsorber will deliver air quality to ISO 8573-1 class 1 for oil
- can be installed in the compressor room or at the point of use to protect critical applications and personnel

modular construction

- compact and lightweight design compared to traditional carbon tower technology
- flexible outlet piping arrangement allows ease of access and simple installation

simple maintenance

- the use of cartridges allows quick, clean and efficient maintenance
 - filtration within the cartridge eliminates the need for external downstream filtration and guarantees performance
 - cartridges are snowstorm filled ensuring optimum performance while eliminating attrition and blocked filters associated with fabricated twin tower designs
-

sizing & specifications

model	service kit ⁽²⁾		inlet & outlet		rated flow ⁽¹⁾		dimensions (ins)			approx. weight
	part no.	qty	NPT	scfm	Nm ³ /h	A	B	C	lbs	
NVR 0185	NVR SK 185	1	1"	185	315	17.3	9.7	25.4	88	
NVR 0370	NVR SK 370	1	1"	370	630	17.3	9.7	31.5	110	
NVR 0750	NVR SK 370	2	2"	750	1275	15.8	22.6	34.3	227	
NVR 1100	NVR SK 370	3	2"	1100	1870	15.8	29.2	34.3	313	
NVR 1500	NVR SK 370	4	2 ½"	1500	2550	15.8	35.8	34.3	397	

specifications

maximum working pressure	232 psig
recommended operating temperature range	36 to 95°F
maximum operating temperature	122°F
estimated cartridge life	12 months ⁽³⁾

inlet air quality requirements ⁽⁴⁾

maximum particulate size	0.01 micron
maximum pressure dew point	-40°F pdp
maximum oil content	0.05 mg/m ³

performance

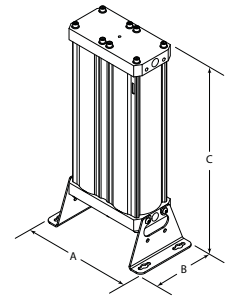
maximum outlet air oil content (@ 95°F)	0.003 mg/m ³ (ppm)
---	-------------------------------

pressure correction factors ⁽⁵⁾

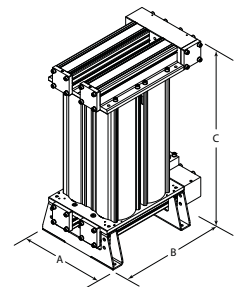
inlet air pressure (psig)	14	29	44	58	73	87	100-232
correction factor	0.25	0.37	0.05	0.62	0.75	0.87	1.00

temperature & dew point correction factors ⁽⁵⁾

inlet air temperature (°F)	<95	104	113	122	inlet dew point (°F)	>+37	<+37
correction factor	1.00	0.98	0.96	0.95	correction factor	0.25	1.00



NVR 0185 to 0370



NVR 0750 to 1500

(1) at inlet conditions of 100 psig and 95°F and 95°F ambient temperature. For all other operating conditions contact support@n-psi.com for sizing assistance

(2) includes purification cartridges (including integral inlet diffusers and outlet particulate filters) and all o-rings

(3) provided as an estimate only. Cartridges must be replaced as required to maintain adequate air quality in accordance with all applicable codes and regulations

(4) if the air doesn't meet these conditions, contact support@n-psi.com to confirm the additional treatment required

(5) to be used as an approximate guide only. All applications should be confirmed by n-psi. Contact support@n-psi.com

nano-purification solutions llc
charlotte, north carolina
united states

nano-purification solutions ltd
gateshead, tyne and wear
united kingdom

nano-purification solutions
st. catherines, ontario
canada

tel: 704.897.2182 • fax: 704.897.2183 • support@n-psi.com • www.n-psi.com



nano
PURIFICATION SOLUTIONS

copyright PURIFICATION SOLUTIONS LLC
publication reference n-psi-V1-02-us