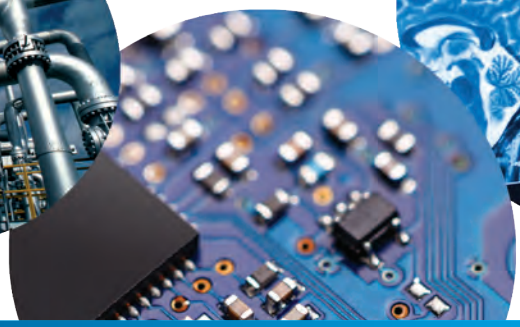


nano

meet & exceed

ISO compressed air quality standards

about us

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.

Our team is comprised of and supported by individuals spanning all disciplines from research & development, engineering & manufacturing, marketing & sales and service & support. Our backgrounds are in air and gas purification and our experience in this field spans a wide range of industries. We combine this knowledge and experience to ensure our products and services are designed and provided to meet the objectives and expectations of you - our Customer.

Customer.

We recognize that our Customers are not only our valuable distribution partners who sell and support our products or the machine builders who depend on them as protection for their equipment. They are the contractors who install them, the manufacturers who use them in their processes and the service people who maintain them. At nano we have developed our products, packaging and support materials to ensure they exceed all of our Customers' expectations.

Service.

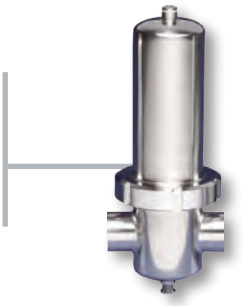
At nano-purification solutions we recognize that world-class customer service is the most important component to any successful business. Your business needs to exceed your customers' expectations to stand out from your competitors and our service must positively impact your business so you can be successful in doing so. Our commitment is simple... we will stand behind our products and ensure that our customer service is unrivaled in the industry.

Experience. Customer. Service...nano

our products

industrial filters

F[1]	centrifugal water separators
F[1]	performance validated filters
F[1]	duplex filters
F[1]	medical sterile filters
F[1]	vacuum pump protection filters
F[1]	medical vacuum filters
F[2]	high capacity flanged filters
F[3]	high temperature dust filters
F[3]	mid pressure aluminum filters
F[4]	high pressure stainless steel filters
F[5]	filter heater combinations
F[6]	mist eliminators



process filters

P[1]	stainless steel industrial filters
P[1]	sterile air depth filters
P[1]	sterile air membrane filters
P[1]	culinary steam filters

desiccant dryers

D[1|2|3]	heatless modular dryers
D[4]	high pressure compact dryers
D[4]	high pressure dryers
D[5]	heatless twin tower dryers
D[5]	externally heated dryers
D[5]	blower purge dryers

refrigerated dryers

R[1]	cycling refrigerated dryers
R[2]	high temperature cycling dryers
R[2]	high temperature direct expansion dryers
R[3]	refrigerated process dryers
R[4]	direct expansion refrigerated dryers

process chillers

C[1]	process chillers

lab gas CO_2 removal dryers

L[1]	lab gas CO_2 removal dryers

nitrogen generators

ECOGEN2	nitrogen generators
GEN2	nitrogen generators
GEN2*plus*	ultra-high purity nitrogen generators
NMG	membrane nitrogen generators

breathing air purifiers

B[1]	breathing air purifiers
B[1]	breathing air purifier modules

vapor removal

V[1]	oil vapor removal system

condensate treatment

S[1]	condensate treatment systems

condensate drains

ND	timed condensate drains
ND	zero air loss condensate drains

ISO air quality

The ISO 8573 group of international standards is used for the classification of compressed air purity. The standard provides the test methods and analytical techniques for each type of contaminant. The table below summarizes the maximum contaminant levels specified in ISO 8573.1: 2010 for the various compressed air quality classes. Each compressed air classification can be achieved by installing a specific selection of nano products depending upon the required performance.

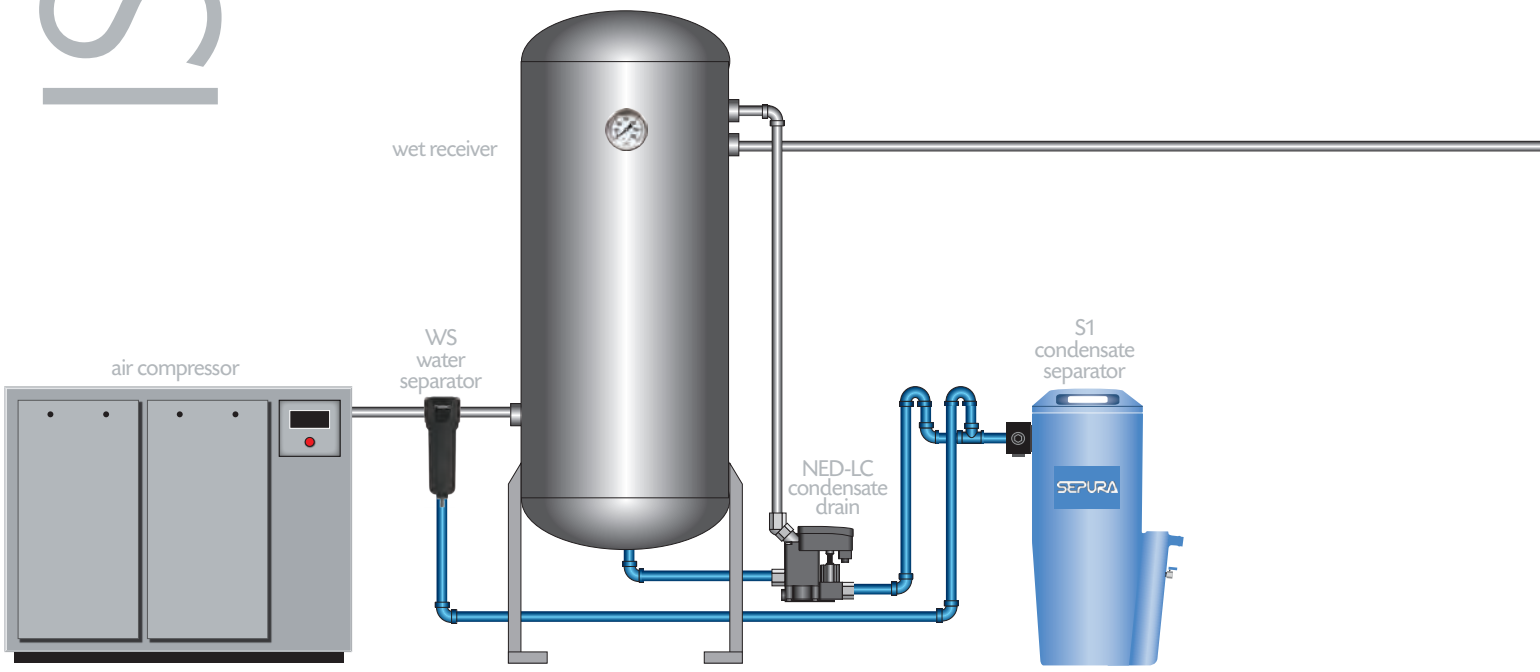
specifications

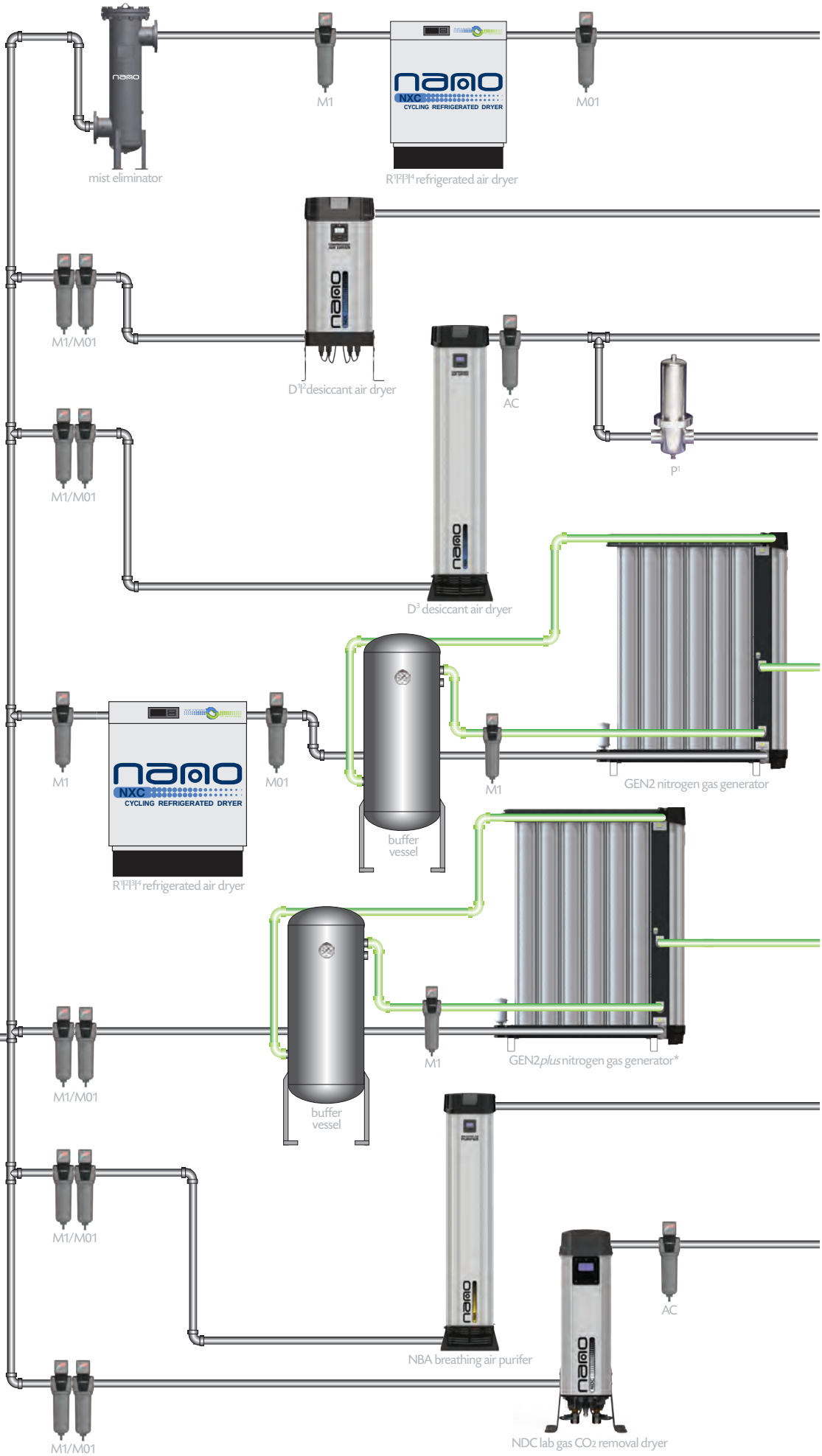
ISO purity class	solid particles				water		oil
	maximum no. of particles per m^3			concentration	vapor	liquid	total oil (1)
	0.1 - 0.5 micron	0.5 - 1 micron	1 - 5 micron	mg/m^3	pressure dew point	g/m^3	mg/m^3
0	as specified by the equipment user or supplier						
1	≤ 20,000	≤ 400	≤ 10	-	≤ -94°F	-	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	-	≤ -40°F	-	≤ 0.1
3	-	≤ 90,000	≤ 1,000	-	≤ -4°F	-	≤ 1
4	-	-	≤ 10,000	-	≤ 37°F	-	≤ 5
5	-	-	≤ 100,000	-	≤ 45°F	-	-
6	-	-	-	≤ 5	≤ 50°F	-	-
7	-	-	-	5 - 10	-	≤ 0.5	-
8	-	-	-	-	-	0.5 - 5	-
9	-	-	-	-	-	5 - 10	-

(1) all forms of oil including liquids, aerosols and vapor

nano product selection

ISO purity class	solid particles	water		oil
0	as agreed by the customer and nano			
1	F1 NWS + M1 + M01	$D^{1\|2\|3\|4\|5}$	≤ -94°F	F1 AC - NVR
2	F1 NWS + M1	$D^{1\|2\|3\|4\|5}$	≤ -40°F	F1 M01
3	F1 NWS + M1	$D^{1\|2\|3\|4\|5}$	≤ -4°F	-
4	F1 NWS + M1	$R^{1\|3\|4}$	≤ 37°F	-
5	F1 NWS + M1	$R^{1\|3\|4}$	≤ 45°F	-
6	F1 NWS + M5	$R^{1\|2\|3\|4}$	≤ 50°F	-
7	F1 NWS + M25	n/a		-
8	F1 NWS	n/a		-
9	F1 NWS	n/a		-





ISO Class 1.4.2 | 1.5.2 | 1.6.2 General Purpose

- main ring air treatment
- woodworking
- temperature control system
- instrumentation
- pneumatic tools
- abrasives blasting

ISO Class 1.2.2 | 1.3.2 High Purity Air

- medical dental air
- pipeline purging
- lasers
- optics
- food packaging

ISO Class 1.2.1 | 1.1.1 Ultra High Purity Air

- semiconductor
- dairies
- biotech
- pharmaceutical

*SQF (Safe Quality Food specification)

N2 Supply («99%)

- chemical transfer
- blanketing
- inerting

N2 Supply (»99%)

- food packaging
- soil remediation
- wave soldering
- UHP lab gases
- laser cutting

*with integrated dryer

ISO Class 1.2.1 Breathable Air

- breathable air
- CO elimination

Lab Gas LC/MS CO_2 Free Air

validations

Filter Element Validation

Filter element performance has been tested to international standard ISO 12500, to provide filtered compressed air to ISO 8573-1 (the international standard for compressed air quality). The result has been verified by IBR, an accredited independent laboratory.

✓	ISO 8573-1 compressed air purity standard
✓	ISO 12500 series international standard for compressed air filter testing

Filter Housing Validation

Filter housings are manufactured and tested to meet the requirements of the Pressure Equipment Directive (97/23/EC). This has been independently verified and validated for performance by Lloyd's Register.

✓	Notified Body (97/23/EC) Lloyd's Register EMEA - Notified Body No 0038. 71 Fenchurch Street, London, EC3M 4BS. England

For a copy of the test reports and validation certificates please contact us at support@n-psi.com or download them from www.n-psi.com.

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