

naro



condensate treatment system oil water separator

flow capacity: 100 - 12,000 Nm³/h (60- 7,000 scfm)

S¹

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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 recognise that world-class customer **service** is the most important component to any successful business.

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



clean and clear

A typical compressed air or gas system produces thousands of gallons of oil contaminated condensate every year. Collecting, storing and disposing of this oily condensate is messy and expensive.

nano understands your needs and has created the range of high-performance NSS oil water separators to remove oil and other contaminants from your condensate allowing you to dispose of it safely and inexpensively. The NSS range lets you stop paying for condensate disposal with this simple and cost effective approach to condensate treatment.



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 cost effective NSS oil water separators are manufactured in a state of the art facility to the highest standards of build quality to ensure reliability and high levels of performance.



nano NSS oil water separators

A typical compressed air and gas system can produce thousands of gallons of condensate per year. This condensate may be as much as 99.9% pure water - so why pay to dispose of water when you can clean it simply and effectively and pour it down the drain? The nano NSS range of oil water separators removes the oil from the water in your condensate so you can dispose of it cleanly and safely, drastically reducing your condensate disposal costs.

The nano NSS is not your typical oil water separator. Its advanced design and unique environmentally friendly oil absorbing filtration media takes separation technology to a whole new level. No messy carbon bags. No settling tanks full of untreated condensate. No external oil collection containers. Just simple and effective condensate treatment.

nano NSS oil water separators reliably give you:

- 100% performance - even on newer synthetic compressor lubricants*
- lower life cycle costs - long media life and simplified maintenance
- lower outlet concentrations - down to 5 ppmv or less
- space saving - smaller footprint for easier installation
- environmentally friendly recycled materials
- treatment for systems up to 12,000 m³/h (7,000 scfm) with a single unit
- peace of mind - the most reliable product of its kind



The NSS range of oil water separators are a reliable and cost-effective solution to the problem of contaminated condensate.

benefits - get more for your money

guaranteed performance

- the advanced filtration media provides long media life and outlet concentrations as low as 5 ppmv even with synthetic compressor lubricants* and all without the size, weight and mess of a settling tank, bags of carbon or oil collection container

easy to size

- no complex sizing tables and charts
- size your unit on just your air or gas flow
- fit applications up to 12000 m³/h (7000 scfm) with a single unit

easy to install

- package includes everything you need for installation
- ready for use - no pre-soaking!
- small footprint for tight installations
- multiple inlet connections for multiple drain points
- wall mounting kits available for many models
- multi-port kit available to increase number of inlet ports

easy to maintain

- service intervals up to two years or longer
- quick release lids for easy access
- no special tools required
- no settling tank to empty and clean
- no funnels to adjust
- no pre-soaking of media bags
- replace the media in less than 15 minutes
- no oil collection container to dump & clean

environmentally friendly design

- 100% recycled (and recyclable) filtration media
- environmentally sustainable manufacturing practices

high quality construction

- single piece molded body 100% tested for zero leaks

warranty

- peace of mind - the NSS 200 through NSS 4200 come standard with a 10 year warranty! conditions apply



* for use with PAG compressor lubricants contact technical support through your local nano office. details on back

nano NSS oil water separators

advanced filter media

Traditional oil water separators use activated carbon which is messy and requires pre-soaking, a long contact time and frequent replacement. The nano NSS range is a new approach to oil water separation using a new, advanced, proprietary, non-carbon based media that attracts oil and repels water - it's as simple as that.

unrivalled performance - even on synthetic oils

Traditional separators rely on settling tanks and the ability for the oil to separate from the condensate mixture, but many synthetic oils won't settle out due to having a specific gravity very similar to water. The heat of compression and timed solenoid drain valves compound the problem as they emulsify the condensate prior to reaching the separator. The NSS oil water separators don't rely on a settling tank.

easy to size

Sizing a traditional separator often requires that you consider condensate flow while accounting for ambient conditions, compressor type, oil type, pressures, temperatures and other equipment. The NSS oil water separators can be sized quickly and easily based on just the air or gas flow. Nothing else!

easy to install

The settling tank on a traditional separator makes the unit big and heavy requiring valuable floor space that must be level for the unit to perform correctly. The NSS oil water separators don't need a settling tank and use less floor space, so they can fit where you need them to. In addition, unlike carbon, the NSS media bags require no pre-soaking - your separator is ready to use, right out of the box.

easy to maintain

Unlike the traditional heavy, dusty bags of activated carbon that need to be pre-soaked, the technologically advanced filter media comes in clean, lightweight, easy to handle bags that require no pre-soaking for quick and simple media replacement. Additionally, there is no settling tank to clean and no oil collection container to empty. The oil is trapped in the filters for easy disposal.

NSS maintenance is now even easier with the addition of our new Service Indicator. The easy to read time strip lets you know exactly when it's time to install a new media kit so you're sure to comply with local discharge standards.



advanced filter media



never miss a media replacement



optional wall mounting brackets for models NSS 200 & NSS 600

environmentally friendly materials & manufacturing

The NSS range is not only technologically advanced, it is also environmentally friendly. Unlike carbon used in traditional separators, NSS filter media is made from 100% recycled materials using environmentally sustainable manufacturing techniques. Separating your condensate is good for the environment. Using recycled materials to do it... even better.



nano media to fit any brand

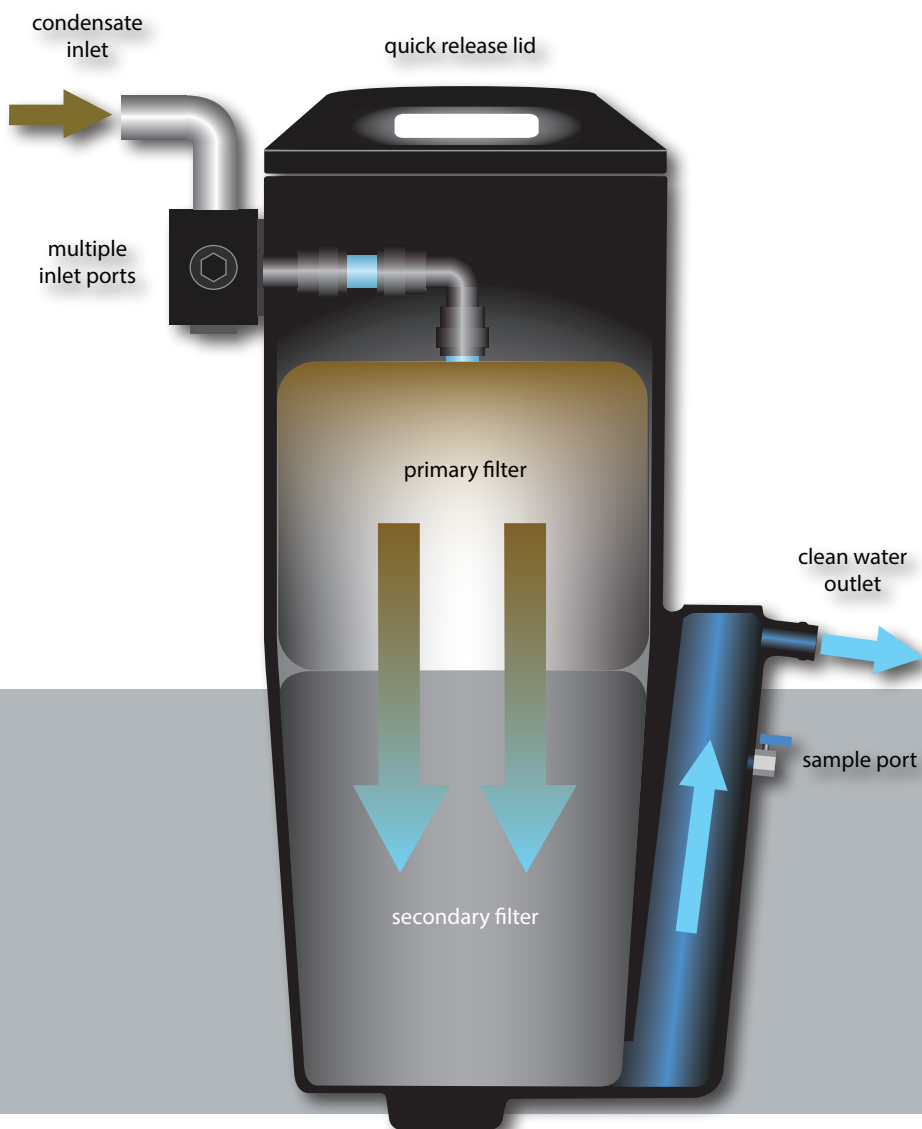
The nano NSS range of oil water separators use a technologically advanced proprietary filtration media to separate oil from water in the condensate discharged from compressed air and gas systems. This non-carbon based and 100% recycled media actively absorbs oil while repelling water resulting in clean condensate that can be disposed of cleanly and inexpensively.

Condensate from compressors, refrigeration dryers, coolers, filters or any other drain points are piped directly to the NSS oil water separator. Here it passes directly into the primary filter which provides three critical functions:

- it depressurises the condensate,
- it traps solid particles protecting the secondary filter, and
- it catches bulk hydrocarbons within a high capacity oil absorbent.

Next, the condensate passes through a deep bed of advanced filtration media which absorbs the oil providing outlet oil concentrations down to 5 ppmv or less so the remaining water can be disposed of safely and in compliance with environmental regulations.

Simple and effective - no messy carbon, no settling tanks, no oil containers. Simply clean condensate.



the disposable NSS 100:
perfect for small applications



the NSS 200 through 2100:
simply clean condensate



two tower NSS 3000 & 2500:
Innovative & cost effective



the NSS 6000 & 12000:
built for high condensate flow

sizing & specifications

separator model	inlet		outlet		rated flow ⁽²⁾		dimensions (mm)			approx. weight	wall mounting bracket	replacement media kit
	BSPP/PTC ⁽¹⁾	BSPP/PTC ⁽¹⁾	Nm ³ /h	scfm	A	B	C	kg	part no.	part no.		
NSS 100	¼" (x1) ⁽¹⁾	¾" (x1) ⁽¹⁾	102	60	239	140	140	3	Included	NSS 100		
NSS 200	½" (x4)	¾" (x1)	204	120	500	216	256	6	120 WMK	200 MRK		
NSS 600	½" (x4)	¾" (x1)	612	360	655	345	282	8	360 WMK	600 MRK		
NSS 1500	½" (x4)	¾" (x1)	1529	900	988	432	495	33	-	1500 MRK		
NSS 2100	½" (x4)	¾" (x1)	2124	1250	988	485	495	45	-	2100 MRK		
NSS 3000	½" (x8)	¾" (x1)	3058	1800	988	988	821	69	-	3000 MRK		
NSS 4200	½" (x8)	¾" (x1)	4248	2500	988	1077	546	95	-	4200 MRK		
NSS 6000	¾" (x2)	¾" (x1)	5947	3500	1000	1000	701	319	-	6000 MRK		
NSS 12000	¾" (x2)	¾" (x1)	11893	7000	1000	1100	1100	467	-	12000 MRK		

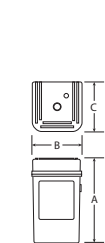
specifications	NSS 100	NSS 200 to 4200	NSS 6000	NSS 12000
expected media life ⁽⁴⁾	8000 hours @ 50 m ³ /h 4000 hours @ 100 m ³ /h	4000 hours	16000 hours @ 6000 m ³ /h 8000 hours @ 8500 m ³ /h	16000 hours @ 12000 m ³ /h 8000 hours @ 17000 m ³ /h
maximum oil carry over	< 20 ppm	< 20 ppm	< 20 ppm	< 20 ppm
warranty	1 year	10 years	2 years	2 years
max condensate inlet pressure	16 barg	16 barg	16 barg	16 barg
inlet condensate temperature range	2 to 40°C	2 to 40°C	2 to 40°C	2 to 40°C

(1) push to connect

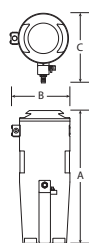
(2) sizing assumes an oil flooded compressor using mineral or synthetic lubricant with a maximum oil carry-over of 5 mg/m³ or less

(3) media life decreases with increased condensate flow. For media life estimates at other flow rates contact your local nano office (details below)

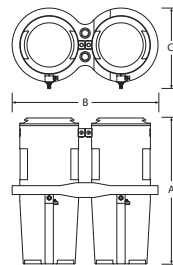
(4) for use with PAG compressor lubricants contact technical support through your local nano office (details below)



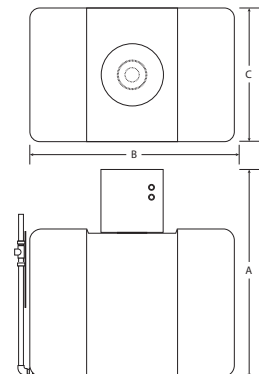
NSS 100



NSS 200 to 2100



NSS 3000 & 4200



NSS 6000 & 12000

nano alternative media kits

Stop wasting time & money on replacement carbon bags. Carbon is messy, time consuming, provides inconsistent performance and is bad for the environment. n-psi sells our nano Media Replacement Kits to fit virtually all brands of oil water separators. Get the legendary performance of nano filtration technology.

The benefits of upgrading to nano Media Replacement Kits:

- twice the oil holding capacity of carbon - longer life
- half the contact time as carbon - higher flow capacity
- clean, light, dust free and easier to handle, install & remove
- no pre-soaking - save 12-24 hours during start up & replacement
- doesn't settle, crush or fracture - consistent performance
- 100% recycled & recyclable material - environmentally friendly

Contact us before your next change-out.



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