



**Sepura STERLING  
oil water separators**

flow capacity: 60 - 7000 scfm (100 - 12,000 Nm<sup>3</sup>/hr)

**S<sup>1</sup>**

# S<sup>1</sup>

## Sepura **STERLING** oil water separators

flow capacity: 60 - 7000 scfm (100 - 12,000 Nm<sup>3</sup>/hr)

# S<sup>1</sup>

Leading edge technology and more than 200 years of **experience**...nano-purification solutions, your world-class provider of state-of-the-art compressed air and gas solutions to industry.

Our commitment at n-psi 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. n-psi realize that world-class customer **service** is the most important component to any successful business.

Experience. Customer. Service... **n-psi**



### 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.

n-psi understands your needs and has created the range of high-performance Sepura oil water separators to remove oil and other contaminants from your condensate allowing you to dispose of it safely and inexpensively. Sepura 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 Sepura 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.

# www.CompressedAirSystems.com

## nano S<sup>1</sup> 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 thousands of dollars per year to dispose of water when you can clean it simply and effectively and pour it down the drain? The nano Sepura 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 S<sup>1</sup> is not your typical oil water separator. Its advanced design and unique environmentally friendly STERLING 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 Sepura 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 10,000 scfm with a single unit
- peace of mind - the most reliable product of its kind



The Sepura 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 STERLING 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 10,000 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

### 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
- **service indicator ensures timely media replacement**

### 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 SEP 120 through SEP 2500 come standard with a 10 year warranty! conditions apply



# www.CompressedAirSystems.com

## nano S<sup>1</sup> oil water separators

### advanced STERLING 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 Sepura 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. Scan this tag with your mobile device to watch a video demonstrating the incredible oil separation capabilities of the STERLING media.



advanced STERLING filter media

### unrivaled 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 Sepura 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 Sepura 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 Sepura 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 STERLING 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 STERLING 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.

Sapura 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.



never miss a media replacement



optional wall mounting brackets

## environmentally friendly materials & manufacturing

The Sepura range is not only technologically advanced, it is also environmentally friendly. Unlike carbon used in traditional separators, STERLING 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.



STERLING media to fit any brand

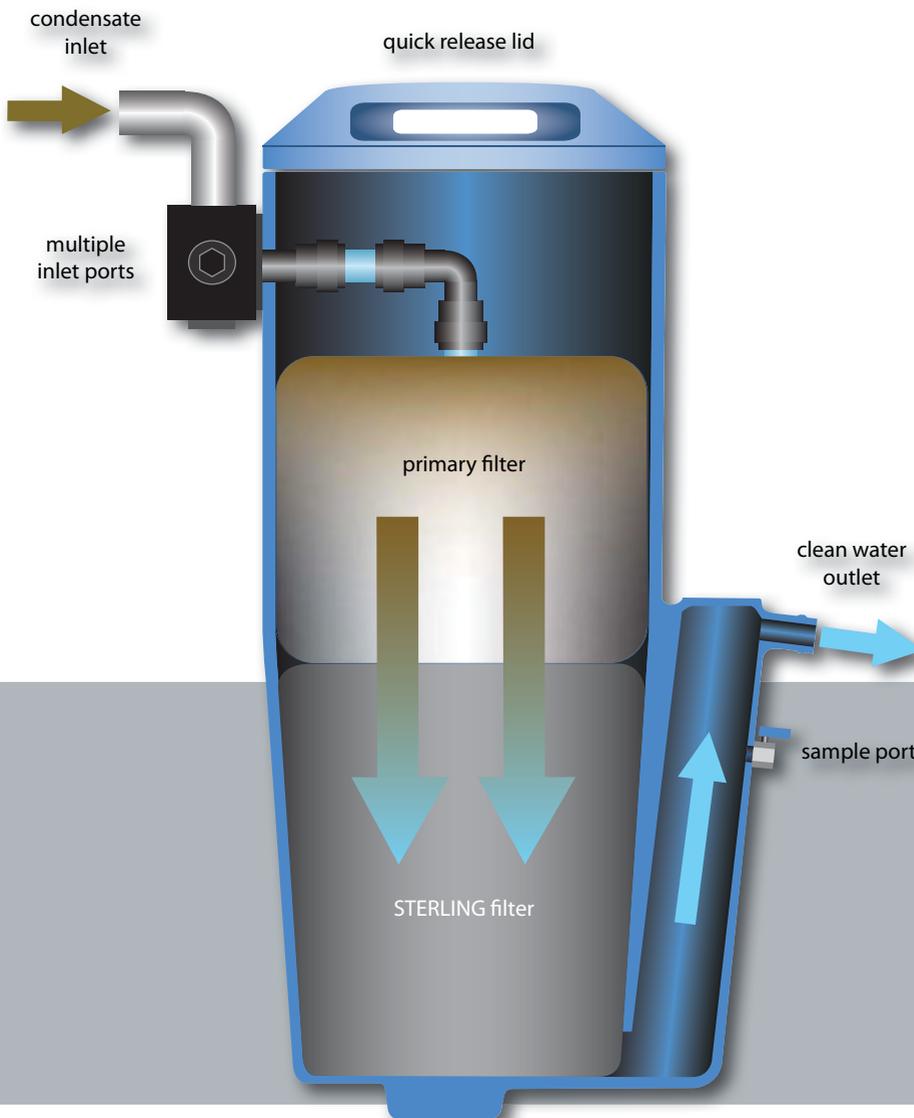
The nano Sepura range of oil water separators use a technologically advanced proprietary filtration media to separate oil from water in the condensate discharged from compressed air and gas systems. This non-carbon based and 100% recycled media actively absorbs oil while repelling water resulting in 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 Sepura oil water separator. Here it passes directly into the primary filter which provides three critical functions:

- it depressurizes 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 STERLING 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 SEP 60:  
perfect for small applications



the SEP 120 through 1250:  
simply clean condensate



two tower SEP 1800 & 2500:  
Innovative & cost effective



the SEP 3500 & 7000:  
built for high condensate flow

# www.CompressedAirSystems.com

## sizing & specifications

separator model	inlet		outlet		rated flow <sup>(2)</sup>		dimensions (inches)			approx. weight	wall mounting bracket	replacement media kit
	NPT/PTC <sup>(1)</sup>	NPT/PTC <sup>(1)</sup>	scfm	Nm <sup>3</sup> /h	A	B	C	lbs	part no.	part no.		
SEP 60 ST	1/4" (x1) <sup>(1)</sup>	3/8" (x1) <sup>(1)</sup>	60	102	9.4	5.5	5.5	2.9	Included	SEP 60 ST		
SEP 120 ST	1/2" (x4)	3/8" (x1)	120	204	19.7	8.5	10.1	6.0	120 WMK	SEP 120 MRK		
SEP 360 ST	1/2" (x4)	3/4" (x1)	360	612	25.8	13.6	11.1	7.9	360 WMK	SEP 360 MRK		
SEP 900 ST	1/2" (x4)	3/4" (x1)	900	1529	38.9	17.0	19.5	32.6	-	SEP 900 MRK		
SEP 1250 ST	1/2" (x4)	3/4" (x1)	1250	2124	38.9	19.1	19.5	45.0	-	SEP 1250 MRK		
SEP 1800 ST	1/2" (x8)	3/4" (x1)	1800	3058	38.9	38.9	20.5	69.0	-	SEP 1800 MRK		
SEP 2500 ST	1/2" (x8)	3/4" (x1)	2500	4248	38.9	43.2	21.5	95.0	-	SEP 2500 MRK		
SEP 3500 ST	3/4" (x2)	3/4" (x1)	3500	5947	39.4	39.4	27.6	319	-	SEP 3500 MRK		
SEP 7000 ST	3/4" (x2)	3/4" (x1)	7000	11,893	39.4	43.3	43.3	467	-	SEP 7000 MRK		

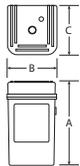
specifications	SEP 60 ST	SEP 120 to 2500	SEP 3500	SEP 7000
expected media life <sup>(4)</sup>	8000 hours @ 30 cfm 5000 hours @ 60 cfm	5000 hours	16000 hours @ 3500 cfm 8000 hours @ 5000 cfm	16000 hours @ 7000 cfm 8000 hours @ 10,000 cfm
maximum oil carry over <sup>(5)</sup>	< 20 ppm	< 20 ppm	< 20 ppm	< 20 ppm
warranty	1 year	10 years	2 years	2 years
max condensate inlet pressure	232 psig	232 psig	232 psig	232 psig
inlet condensate temperature range	35 to 110°F	35 to 110°F	35 to 110°F	35 to 110°F

(1) inlet and outlet connections on the SEP 60 ST are push to connect. All other models are NPT threaded

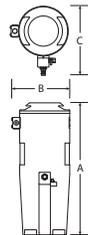
(2) sizing assumes an oil flooded compressor using mineral or synthetic lubricant with a maximum oil carry-over of 5 mg/m3 or less

(3) media life decreases with increased condensate flow. For media life estimates at other flow rates contact support@n-psi.com

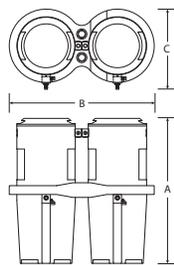
(4) for use with PAG compressor lubricants contact n-psi technical support or email support@n-psi.com



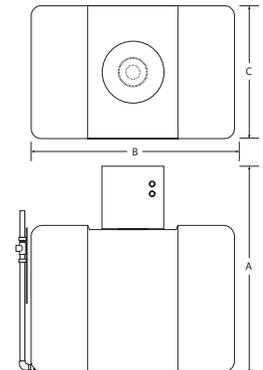
SEP 60 ST



SEP 120 to 1250 ST



SEP 1800 & 2500 ST



SEP 3500 & 7000 ST

## 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 STERLING Media Replacement Kits to fit virtually all brands of oil water separators. Get the legendary performance of STERLING filtration technology.

The benefits of upgrading to STERLING 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.



scan this tag with your mobile device to watch a video demonstrating the ease of maintenance of a Sepura oil water separator

nano-purification solutions  
11330 vanstony drive  
huntersville, nc 28078  
usa

tel: (704) 897-2182  
fax: (704) 897-2183  
email: support@n-psi.com  
web: www.n-psi.com



**nano**  
PURIFICATION SOLUTIONS

copyright nano-purification solutions  
publication reference n-psi-S1-04-us