

## Condensate Separators

HGS SERIES & HPE SERIES



# Selectively Target Lubricants to Ensure Successful Separation

## Condensate...The Byproduct of Air Compression

Condensate generated by lubricated type air compressors is comprised of atmospheric borne water vapor and lubricant from the compression process. Post compression, condensate is dropped from the air stream in the cooling, refrigerated drying and filtration phases of the air treatment process. Regardless of site conditions, it is virtually impossible to remain legally compliant with local discharge regulations without proper separation equipment.

## Condensate Volume... It Changes with the Weather

Changes in ambient temperature, relative humidity and plant air demands leaves the ratio of lubricant-to-water, commonly referred to as parts per million (ppm), in flux. Condensable water vapor varies from practically nothing during frosty winter conditions, to large volumes produced during the heat and humidity of summer.

With average ambient conditions of 70°F/70% R.H., a 500 scfm (100 HP) air system can fill two (2) 24-foot swimming pools every year. Rather than store the condensate and pay to have it hauled away, both economy and ecology dictate the installation of the proper Deltech Condensate Separator to target the undesirable lubricant.

## ASTM #D-1401 Test Results...The key to Separator Selection

Equal parts of fresh lubricant and distilled water are blended in this laboratory test performed by the lubricant manufacturers. Due to each unique formulation, test results will vary from manufacturer-to-manufacturer for what appears to be the same type of lubricant. Results range from complete separation in <1 minute, to a homogenized emulsion that never separates. Comprehensive lubricant identification is critical to ensure the proper Condensate Separator is selected.

### SELECTION GUIDELINES\*

MODEL	LUBRICANT ML	DISTILLED		TIME MIN.
		H <sub>2</sub> O ML	EMULSION ML	
HGS	40	40	0	1
HPE	<40	>40	2 or 3	varies

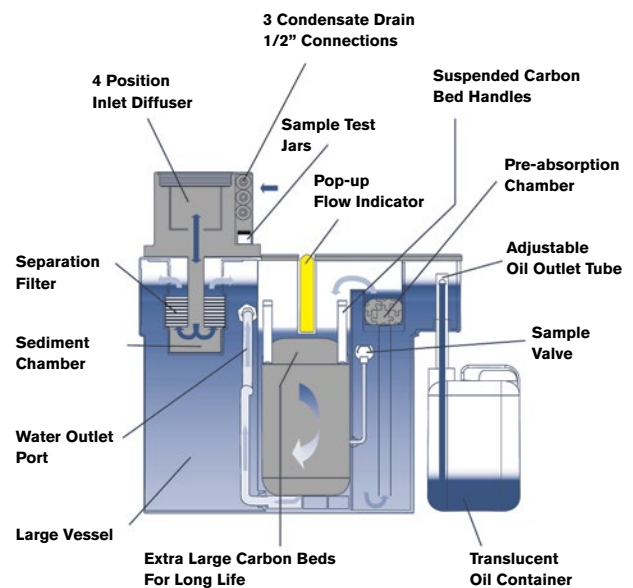
\* Computerized sizing program ensures proper selection. Consult your distributor.

## HGS SERIES...

### TARGETS DEMULSIBLE LUBRICANTS

"Gravity Separation" Condensate Separators are ideal for applications that use a single lubricant and rapidly separate in <5 minutes into 2 distinct layers. Excellent candidates tend to be proprietary PAO (polyalphaolefin) based lubricants marketed by compressor manufacturers.

HGS Series Separators use a large tank of water that allows separable lubricant to float to the surface. Incoming condensate displaces cleaner water from the bottom to flow through a bed of activated carbon to remove trace lubricant to 15 ppm.



## ACTIVE MEDIA



**HGS Series**  
Pelletized activated carbon  
adsorbs trace lubricants



**HPE Series**  
Magnetized zeolite absorbs  
polar formulations

## HPE SERIES....

### TARGETS EMULSIFIED LUBRICANTS

"Polar Extraction" Condensate Separators are ideal for applications that use multiple lubricants that don't separate well. Originally designed for homogenous Polyglycol (PAG) based polar formulations like SSR Ultra Coolant® and Sullube 32®, HPE Series separators have excelled in tough applications with mixed lubricants (consult Distributor for Sullair 24KT®\*) from a variety of compressor stations.

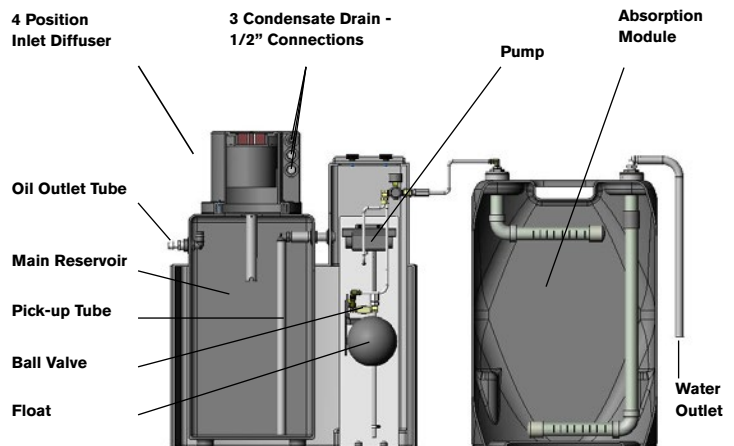
HPE Series Condensate Separators use specially coated zeolite to establish a polar magnetic field that selectively targets positive and negatively charged lubricant molecules. Attracted to the charged surface, polar lubricant molecules bond to the opposite magnetic pole and are removed from the condensate. As water is neutral, it slips through the Absorption Module unimpeded to deliver < 15 ppm to sanitary sewer.

*SSR Ultra Coolant® registered trademark of Ingersoll-Rand. Sullube 32® and 24KT® are registered trademarks of Sullair Corporation.*

### Features 3 Application Friendly Versions

Pressure Fed Separation system for larger air systems to 1,125 scfm

- Depressurization chamber with 3 inlet connections
- Patented automatic level control system #U.S. Patent 6,132,620
- Pneumatic pump adapts to all size Absorption Modules, prevents overflow and transports condensate to sanitary sewer
- Self-contained Absorption Module lasts about 1 year
- Optional Condensate Control Manifold for system expansion



### Gravity Fed

Separation system for air systems to 125 scfm

- Wall-mounted Depressurization Chamber with 3 inlet connections
- 6' Large I.D. hose gravity feeds Absorption Module
- Design ensures up to 7.2 psi
- Interconnecting fittings included



### Adapter Package

Converts ANY gravity type separator to an HPE Series separator.

- Eliminates overflow problems caused by choked carbon filters
- Upgrades your old separator and eliminates the carbon filter
- Remote pumping chamber collects outlet water from gravity separator
- Automatic operation with level controlled pump system
- Pressure fed long life Absorption Module
- Extends filter life to approximately 1 year



## HPE SERIES PRODUCT SPECIFICATIONS

TECHNOLOGY GROUP PACKAGES (INCLUDES FILTER MODULE)	MODEL NUMBER	MAX CFM	NOMINAL HP	EXTRACTED LUBRICANT CAPACITY gallons	CONDENSATE INLET NPT	WATER OUTLET NPT	DIMENSIONS							
							H		W		D		WEIGHT	
							in	mm	in	mm	in	mm	lbs	kg
<b>Gravity-Fed</b> (Wall-mounted diffuser for economy through 125 scfm)	HPE-G-60	60	15	1.5	(3) 0.5"	0.75"	97	2459	11	280	11	280	42	19
	HPE-G-125	125	30	5			102	2586	15	381	15	381	100	46
<b>Pressure-Fed</b> <sup>1</sup> (Combines: Diffuser, gravity separation, integral pump for flows through 1125 scfm)	HPE-P-250	250	50	5			38	960	46	1131	20	496	140	64
	HPE-P-560	560	100	12			38	960	48	1222	20	496	250	114
	HPE-P-1125	1125	200	24			38	960	61	1545	23	585	450	204
<b>Adapter Package</b> <sup>1</sup> (Upgrade any brand of gravity type separator to a HPE Series.)	HPE-A-60	60	15	1.5			27	686	26	661	15	381	47	22
	HPE-A-250	250	50	5			27	686	30	762	15	381	105	48
	HPE-A-560	560	100	12			29	724	34	854	19	473	215	98
	HPE-A-1125	1125	200	24			33	826	38	966	23	585	415	98

1 Air Inlet Connection (1/4" NPT) requires clean, dry compressed air (<.35 scfm @ 20 psig) for pump operation

## VOLUME MODULATION & BALANCE DIVERTER

VOLUME MODULATION & BALANCE DIVERTER	MODEL NUMBER	MAX GPH PER OUTLET	CONDENSATE INLETS NPT	CONDENSATE OUTLETS NPT	INSTANTANEOUS LIQUID CAPACITY GALLONS	SYSTEM WEIGHT	
						LBS	KG
<b>Condensate Control Manifold</b>	CCM-3	115	(3) 1/2"	(3) 1/2"	2.4	15	7
	CCM-4	115	(3) 1/2"	(4) 1/2"	2.4	15	7

## REPLACEMENT PARTS

REPLACEMENT PARTS	MODEL NUMBER	MAX CFM	NOMINAL HP	EXTRACTED LUBRICANT CAPACITY gallons	DIMENSIONS						WEIGHT	
					H		W		D		lbs	kg
					in	mm	in	mm	in	mm		
Absorption Modules	AM5	60	15	1.5	15	381	11	280	11	280	35	16
	AM15	250	50	5	20	508	15	381	15	381	90	41
	AM30	560	100	12	29	724	19	473	19	473	200	91
	AM55	1125	200	24	33	826	23	585	23	585	400	182
Pump Rebuild Kit	PRK-1											
Pump	PDP-1											

## HGS SERIES PRODUCT SPECIFICATIONS

MODEL NUMBER	MAX CFM 90°F / 90% RH	MAX CFM 70°F / 70% RH	OIL CONTAINER CAPACITY gallons	CONDENSATE INLET NPT	WATER OUTLET NPT	DIMENSIONS						WEIGHT	
						H		W		D		lbs	kg
						in	mm	in	mm	in	mm		
<b>HGS-150</b>	150	357	1.5	(3) 1/2"	3/4"	30	762	27	674	19	483	53	24
<b>HGS-300</b>	300	714	5			39	991	34	864	21	534	77	35
<b>HGS-600</b>	600	1428	5		1"	39	991	35	889	31	788	120	55
<b>HGS-1200</b>	1200	2856	5 1		(2) 1"	39	991	72	1829	31	788	240	106
<b>HGS-1800</b>	1800	4284	5 2		(3) 1"	39	991	109	2769	31	788	360	164
<b>HGS-2400</b>	2400	5712	5 3		(4) 1"	39	991	146	3709	31	788	480	218

<sup>1</sup> 2 Oil Containers    <sup>2</sup> 3 Oil Containers    <sup>3</sup> 4 Oil Containers



SPX FLOW Inc. | 4647 SW 40th Avenue | Ocala, Florida 34474-5788 U.S.A.

P: (724) 745-1555 F: (724) 745-6040 E: deltech.americas@spxflow.com

www.spxflow.com/deltech

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