WOS CD SERIES



ISO 9001 BUREAU VERITAS CEEDER ASMENTE FILE SIDE UNITS

Condensate is always present in the compressed air systems. As a result of the operation of the oil lubricated compressors it also contains about 1% oil. Even small quantities can have harmful effect on downstream equipment and processes.

Condensate from lubricated compressed air systems must be disposed of in a responsible manner, in accordance with local regulations and by laws. Therefore, should not be discharged directly into the environment, first of all, oil must be separated from the water. Oil /water separator is a device that performs this task efficiently.

The result of efficient separation is a clean water with a residual oil content less than 20 ppm (by reducing the flow rate as well as less than 10 ppm).



TECHNICAL DATA							
Type	Pipe size	Hosetail connections	Dimensions [mm]				
	inch	pcs	А	В	C		
WOS CD 2	3/4"	2	257	88	20		
WOS CD 4	1 ¹ / ₂ "	4	461	125	32		
WOS CD 8	2"	8	684	163	43		
WOS CD 12	3"	12	795	240	59		



CONDENSATE DISTRIBUTOR

DESCRIPTION

WOS CD is intended for systems, where amount of generated condensate exceeds capacity of single largest available WOS water oil separator. WOS CD can evenly distribute collected condensate between up to three WOS-35 water oil separators.

WOS CD is equipped with flow distributor on the inlet port, up to 8 hose tail connections mounted on elbows for convenient outlet, manual ball valve for cleaning purpose and vent port for safe aeration. Optional wall mounting kit is available.

WATER/OIL SEPARATORS - WOS **Product overview**







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AIR





Condensate treatment

BASIC PRINCIPLES



CLEAN WATER OUTLET residual oil content <10ppm

WOSm water/oil separator

WOSm series is intended for reliable oil separation from condensate. Since the adsorption catridge is replacable, maintenance is quick and clean.

The condensate enters into the separator under pressure via the depressurisation chamber with air filter.

Oil filter cartridge cointains polypropylene fibres, which performs the first stage separation and activated carbon, which performs second stage separation.

The result is a clean water with a residual oil content of less than 20 ppm (by reducing the flow rate as well as less than 10 ppm).

2 WOS water/oil separator

The condensate enters into the separator under pressure via the depressurisation chamber. It contains a filter, which prevents the condensate to be relieved to the ambient.

The condensate then travels to the 1st stage chamber, where the polypropilene fibres are installed. They eliminate the main part of oil content.

The flow of the condensate, which contains mainly water and traces of oil in small quantities, flows downstream to the second chamber, where a cartridge with activated carbon is installed. There occurs the final process of oil adsorption.

The result is a clean water with a residual oil content of less than 20 ppm (by reducing the flow rate as well as less than 10 ppm).

3 WOS CD condensate distributor

In systems, where amount of generated condensate exceeds capacity of single largest available water oil separator, WOS CD - condensate distributor is used.

WOS CD can evenly distribute collected condensate between up to three WOS-35 water oil separators.

Condensate drains discharge condensate over drain pipe system directly to the condensate distributor. The condensate is collected inside of the distributor bowl. The air is released over outlet aperture with a filter, which prevents the condensate to be relieved to the ambient.

WOS CD is equipped with up to 8 hose tail connections mounted on elbows for convenient outlet.

WOSm series WATER - OIL SEPARATORS

operating temp. range inlet connection

1,5 to **45** °C ø8

APPLICATIONS

ompressed air systems suitable for installation inside compressors ompressed air dryers condensate separators pressure vessels

DESCRIPTION

WOSm water oil separators have been developed to separate lubricant oil from condensate generated in compressed air systems. Due to patented technology regular service can be done in 30 seconds without any cleaning.

Separation begins in "cyclonic depressurization chamber" and continues in "filter cartridge". When the "filter cartridge" is fully saturated you just simply unscrew complete cartridge and replace it with new one.

All the condensate stays in old cartridge which can also be sealed with plastic cover and disposed according to local directives and laws.



Operating temperature		1,5 - 45 °C (max 6	5 °C) ⁽¹⁾ ; 35 - 113 °l	= (max. 149 °			
	Operating media	Condensate (air, water, oil); Non agresive; Not s					
Residual oil content		< 20ppm					
Service interval		When first of following parametres appears:					
		- 4000 operating hours of compressor ⁽²⁾					
		- 12 months regardless of compressor operating					
		- when all white polypropylene media becomes					
Т	echnical data	Cold climate zone 15 °C 60 %RH	Mild climate zone 25 °C 60 %RH	Hot climate 40 °C 100			
Т	echnical data Max oil adsorption [g]	Cold climate zone 15 °C 60 %RH 740	Mild climate zone 25 °C 60 %RH 650	Hot climate 40 °C 100 370			
T Sm1	echnical data Max oil adsorption [g] Max FAD [Nm³/min]/[scfm]	Cold climate zone 15 °C 60 %RH 740 1,23/43,05	Mild climate zone 25 °C 60 %RH 650 1,08/37,8	Hot climate 40 °C 100 370 0,62/21			
T Sm1	echnical data Max oil adsorption [g] Max FAD [Nm³/min]/[scfm] Max condensate flow [l/h]	Cold climate zone 15 °C 60 %RH 740 1,23/43,05 0,57	Mild climate zone 25 °C 60 %RH 650 1,08/37,8 0,90	Hot climate 40 °C 100 370 0,62/21 1,91			

1520

2,54/88,9

1,19

Max oil adsorption [g]

Max condensate flow []/h

⁽¹⁾ Max. operating temperature is 65 °C, but when temperature is over 45 °C, performance may decrease. ⁽²⁾ At compressor oil carryover 2,5 mg/m³. Lower/higher oil carry over means proportionally longer/shorter lifetime (e.g. if oil carryover is 5 mg/m³ lifetime reduces to 2000 operating hours).

1340

1,87

















WOS SERIES WATER - OIL SEPARATORS

inlet connection	ø10
temperature oper. range	1,5 to 45 °C

APPLICATIONS

compressed air systems

DESCRIPTION

WOS water oil separators have been developed to separate lubricant oil from condensate from compressed air⁽¹⁾ systems.

WOS water-oil separator can be used in variety of applications. For applications not listed please contact producer or your local distributor.



Water quality test

Water quality test should be performed at least once per month, to control the contamination level of disposed condensate.

If oil concentration is reached, oil filter cartridges must be changed.











WOS - TECHNICAL DATA							
Operating temperature	1,5 - 45 °C (max 65 °C) ⁽³⁾ ; 35 - 113 °F (max. 149 °F) ⁽³⁾						
Operating media	Condensate (air, water, oil); Non agresive; Not suitable for emulsion						
Residual oil content	< 10ppm	Ţ			. Ę		ļ
Service interval	When first of following parametres appears:			$\bigcirc \square$			
	- 4000 operating hours of compressor (4)	U					
	- 12 months regardless of compressor operating hours						П
	- outlet oil concentration reaches concentration determined with local directives				5		3
			< A			В	

Technical data		Cold climate zone	Mild climate zone Hot climate zone		Dimensions [mm]			
		15 °C 60 %RH 25 °C 60 %RH		40 °C 100 %RH	А	В	С	
W05-4	Max oil adsorption [kg]	2,89	2,43	1,23	416	243	411	
	Max FAD [Nm³/min]/[scfm]	4,82/170	4,04/142	2,05/72,3				
	Max condensate flow [I/h]	2,3	3,4	6,3				
WOS-8	Max oil adsorption [kg]	2,3	5,04	2,55	730	343	680	
	Max FAD [Nm³/min]/[scfm]	10,0/353	8,4/296	4,25/150				
	Max condensate flow [I/h]	4,7	7,1	13,1				
W0S-20	Max oil adsorption [kg]	14,64	12,28	6,22		366	940	
	Max FAD [Nm³/min]/[scfm]	24,4/861	20,5/723	10,37/366	820			
	Max condensate flow [I/h]	11,4	17,2	32,0				
W0S-35	Max oil adsorption [kg]	25,4	21,31	10,79		386	1137	
	Max FAD [Nm³/min]/[scfm]	42,3/1495	35,5/1254	17,99/635	960			
	Max condensate flow [I/h]	19,8	29,8	55,6				

⁽³⁾ Max. operating temperature is 65 °C, but when temperature is over 45 °C, performance may decrease.

⁽⁴⁾ At compressor oil carryover 2,5 mg/m³. Lower/higher oil carry over means proportionally longer/shorter lifetime (e.g. if oil carryover is 5mg/m³ lifetime reduces to 2000 operating hours).

