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## **Why Mikropor Separators?**

With over 3000 Air/Oil Separator designs for compressors, Mikropor offers multiple options for the full range of air flow and performance requirements.

### Mikropor Air/Oil Separators

Conventional, pleated, depth construction, spin-on and state-of-the-art "sep-n-sep" design separators allow Mikropor to cover the air/oil separation needs of the entire compressor applications.



## Air Flow Rates of Mikropor Air/Oil Separators (m<sup>3</sup>/min @ 7 bar working pressure)

#### **Dimensions**

Air/Oil Separator Overall Height (mm)

		150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
	Conventional	1	2	2															
110	<b>3</b> S	3	5	5															
	Sep-n-Sep®																		
135	Conventional	2	2	3	3	4	5												
	3S	4	5	6	8	8	9												
	Sep-n-Sep®																		
150	Conventional	2	2.5	3	4	5	5	6	7										
	3S	4	5	7	8	10	11	12	13										
	Sep-n-Sep®																		
170	Conventional	2	3	4	5	5	6	7	8	9	9								
	3S	4	6	8	10	11.5	13	14	16	17	19								
	Sep-n-Sep®																		
200	Conventional		3	5	5	7	7	8	9	10	11	12							
	3S		7	9	11	13	15	17	19	21	23	25							
	Sep-n-Sep®																		
220	Conventional			5	6	7	8	9	11	12	13	14	15	16					
	3S			10	13	15	17	19	22	23	26	28	30	33					
	Sep-n-Sep®																		
270	Conventional			7	8	9	10	12	13	15	16	17	19	20	22	23	24		
	3S			14	15	18	21	24	27	29	32	35	38	41	44	47	49		
	Sep-n-Sep®			21	23	27	31	36	40	44	48	52	56	61	66	70	73		
	Conventional			8	9	10	12	13	15	17	18	20	21	23	24	26	28	29	31
300	3S			15	18	21	24	27	30	34	37	40	43	46	49	53	57		
	Sep-n-Sep®			24	28	32	37	41	46	53	57	62	66	71	76	82	88		
	Conventional				10	12	14	16	18	20	22	24	26	28	30	32	34	36	38
350	3S				20	24	28	32	36	40	44	48	52	56	60				
	Sep-n-Sep®				32	38	44	50	56	63	69	75	81	88	94				
	Conventional				11	13	15	17	19	21	23	25	27	29	32	33	35	37	39
375	<b>3</b> S				22	26	30	34	38	42	46	50	54	58					
	Sep-n-Sep®				34	40	47	54	60	66	72	79	85	91					
	Conventional					15	17	19	21	23	25	27	29	32	34	36	38	40	42
400	3S					30	34	37	42	46	51	55	59						
	Sep-n-Sep®					47	52	59	67	73	81	88	94						
	Conventional						20	22	25	27	30	33	35	37	41	43	45	48	51
470	3S						40	45	50	55									
	Sep-n-Sep®						63	71	79	87									
500	Conventional							24	27	30	33	36	39	42	45	48	51	54	56
	3S							50	55	60									
	Sep-n-Sep®							82	91	100									

# AIR/OIL SEPARATORS

### **Conwrap Separators**

Mikropor "Conwrap" Separators are standard wrapped style separators. These separators are designed for outside to inside flow and can be used with all oil injection Rotary Vane and Rotary Screw Compressors. Conwrap separators operate between 1 to 60 m<sup>3</sup>/min flow rate at 7 bar with 1 to 3 mg/m<sup>3</sup> oil carry over.

## "3S" Depth Construction Air/Oil Separators

The revolutionary Mikropor "3S" Separator is designed to fit the smaller separator housings without sacrificing operating performance. The "3S" separator has double to tripled capacity when compared to a conventional separator with the same dimensions. The "3S" separator has 1/2 - 1/3 of the volume of a conventional separator functioning in the same operating conditions. This increased capacity is achieved with specially designed progressive type, deep bed, coalescing media using an increased number of wraps.



Pleated separators increase the media surface area to reach higher capacities while maintaining the dimensions. Mikropor manufactures dozens of pleated separator designs.



**3S - SEPARATORS** 



**CONWRAP** 



**PLEATED** 

# Zero Spin-On Type Air/Oil Separators

Mikropor Spin-On Type Air/Oil Separators are manufactured as exchangeable elements. Because Spin-Ons do not require a compressor housing, they permit uncomplicated and quick replacement without dismantling the compressor. Spin-On Type Air/Oil Separators are available for 0.5 to  $7 \, \text{m}^3$ /min flow rates operating at  $7 \, \text{bar}$ .

	Maximum Flow Rate	Dia 1	Dia 2	Height		
Model	(m³/min @ 7 bar)	(mm)	(mm)	(mm)		
Zero 10	0.5	Ø79	Ø80	84		
Zero 20	1	Ø79	Ø83	137		
Zero 30	2	Ø97	Ø100	214		
Zero 40	1.5	Ø97	Ø100	175		
Zero 50	4	Ø110	Ø111	261		
Zero 60	3	Ø138	Ø141	192		
Zero 70	6	Ø138	Ø141	314		
Zero 80	7	Ø138	Ø141	349		



# AIR FILTER ELEMENTS

### FILTRATION AND SEPARATION

#### Micro-Glass Fiber

High efficiency Micro-Glass nanofiber media (80 times finer than Cellulose Fiber) delivers higher targeted efficiencies, longer service life, wide chemical and synthetic lubricant compatibility even at extreme working temperatures.

#### **Element 4 Levels**

Mikropor offers four layers of Superior Protection-from 1 micron to 0.01 micron. Durable element construction and an efficient drain layer ensure continued performance with optimal element change periods.

### **Helix Tubes for Strength**

Mikropor Compressed Air Filters have louvered stainless steel helix tubes providing increased strength and protection against severe pressure drops while improving performance by forcing air to pass diagonally through the element

### Synthetic Compatibility and Durable Epoxy

Mikropor Compressed Air Filters are compatible with all synthetic lubricants in the industry. Durable Epoxy securely bonds the robust end caps to the filter tubes and will not be affected by the synthetic lubricant in compressed air.

### **Test**

With over 30 years of experience Mikropor manufactures the best performing replacement elements in the industry. Through rigorous testing and validation processes Mikropor assures that the replacement elements perform equal to or better than the original elements. Replacement elements have been designed and tested in ourstate-of-the-art test laboratories.

Mikropor labs are capable of making the following tests;

- Differential pressure at given flow rates
- Particle efficiency tests
- Oil aerosols measurements
- Pressure dew point

All tests are conducted as per the relevant ISO 12500 test standards.





