

ecosep Series

Oil/Water Separators



Oil can seriously affect the efficient operation of sewage purification, as well as harm the environment. For this reason, very low oil in water discharge limits are permitted and rigid legislation exists in most countries to protect the environment against this type of contamination.

International standards such as ISO 14001 also require the compressed air user to comply with local environmental legislation and show use of protective systems and procedures.

After the oily condensate has been efficiently removed from the compressed air system it cannot be discharged directly to the sanitary sewer without first having the oil content reduced to within legal disposal limits.

Parker Zander Oil/Water Separators are a simple, economical and environmental solution. These oil/water separators are installed as part of the compressed air system and simply reduce the oil concentration in the collected condensate to a level permitted for discharge. This allows the larger volume of clean water, up to 99.9% of the total condensate, to be discharged safely into the sanitary sewer and the relatively small amount of concentrated oil to be disposed of legitimately and economically.



- Discharging oil contaminated condensate from compressed air systems is not only harmful to the environment, it is probably illegal.
- Oil spillages from industry do not have to be big to be serious.
- One liter of oil can cover 3500m² of water surface.
- One gallon of oil can cover 4 acres of water surface.

Benefits:

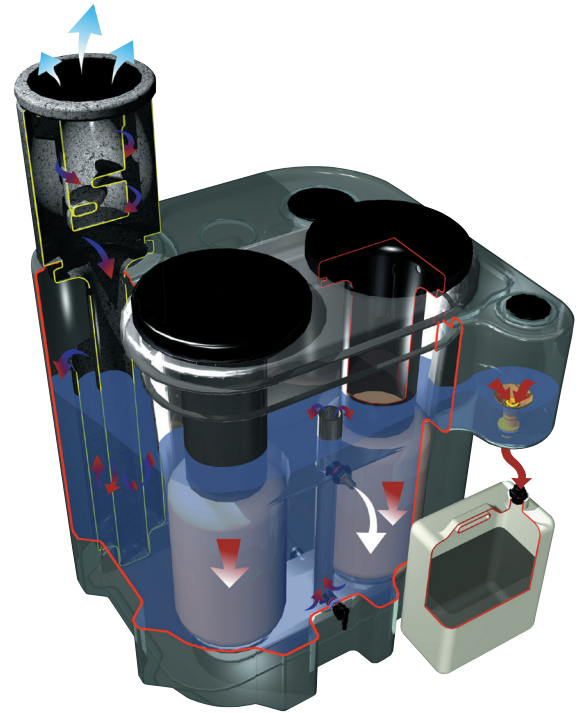
- Help to protect and maintain the environment.
- Efficiently separate oil and water on-site and return up to 99.9% of the condensate to sanitary sewers.
- Meet trade effluent discharge regulations.
- Rapid payback over conventional disposal methods.
- Simple to install, operate and maintain.
- Will assist you in achieving ISO 14001 certification.



ENGINEERING YOUR SUCCESS

Special Features

- Single piece units - reduce overall footprint.
- Robust, corrosion resistant, polyethylene construction, includes ribbing for extra strength.
- Large centrifugal inlet chamber provides effective venting of compressed air energy, while multiple inlet ports and four inlet chamber positions simplify installation.
- Large, easily cleaned primary settlement chamber for the accumulation and removal of dirt particles.
- Large internal galleries reduce risk of an internal blockage and simplify maintenance.
- Oil absorbing pre-filter(s) protect carbon stage from bulk contamination.
- Large carbon stage for increased contact time, improving water quality and extending carbon life.
- High specification carbon for improved service intervals.
- Adjustable oil outlet funnel for the efficient removal of separated oil.
- Sealed external oil container for easy oil disposal.
- Sample tap removes need to disconnect outlet piping when obtaining a test sample.



Accessories

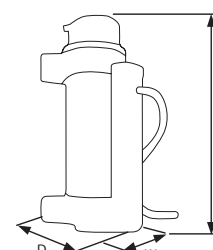
- Additional oil containers for simple maintenance.
- Flow splitter provides equal distribution of condensate on multiple oil/water separator installations.
- Condensate manifold - multi ported device for connection to drain ports.

Technical Data

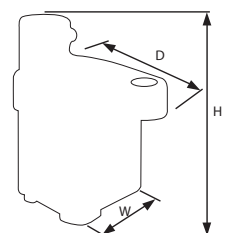
Model	ES2100	ES2150	ES2200	ES2300	ES2400	ES2500	ES2600
Inlet Connections	1 x 1/2" 1 x 1/4"	1 x 1/2" 1 x 1/4"	1 x 1/2" 1 x 1/4"	1 x 1/2" 3 x 1/4"	1 x 1/2" 3 x 1/4"	1 x 1/2" 3 x 1/4"	1 x 1/2" 3 x 1/4"
Outlet Hose Connections	3/4" (19 mm)	1" (25 mm)	3/4" (19 mm)	1" (25 mm)	1" (25 mm)	1" (25 mm)	1" (25 mm)
Settlement Tank Capacity	N/A	16 US G	20 US G	33 US G	49 US G	94 US G	128 US G
	N/A	60l	75l	125l	185l	355l	485l
Max. Pressure	16 bar g (232 psi g)						
Min/Max Temperature	°F	41 to 95	41 to 95	41 to 95	41 to 95	41 to 95	41 to 95
	°C	5 to 35	5 to 35	5 to 35	5 to 35	5 to 35	5 to 35
Material (Re-cyclable)	Polyethylene						

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight			
							Empty		Full	
	ins	mm	ins	mm	ins	mm	lbs	kg	lbs	kg
ES2100	33.0	842	10.6	270	12.4	316	13	6	154	24.5
ES2150	32.0	810	17.0	433	14.0	350	22	10	173	78.5
ES2200	32.0	803	18.0	450	14.0	350	26	12	206	93.5
ES2300	47.0	1195	20.0	500	41.7	795	59	27	350	159
ES2400	47.0	1195	26.0	650	41.7	795	79	36	477	217
ES2500	60.0	1535	28.0	700	38.7	980	154	70	880	400
ES2600	60.0	1535	39.0	1000	39.7	1005	214	97	1210	550



ES2100



ES2150 to ES2600

There are many factors which play a part in the selection of a static oil/water separator, with ambient conditions of the installation and oil type being the most important. Capacities shown in this literature assume installation in two of the worlds major climatic conditions. Should the oil/water separator be installed in conditions other than those shown, please contact your local Parker Zander outlet or approved distributor/agent for correct sizing.

System Conditions

Ambient Temperature at Compressor Inlet: 77°F (25°C)
Relative Humidity: 85%
Compressor Discharge Temperature: 95°F (35°C)
Refrigerated Dryer Dewpoint if Fitted: 35°F (2°C)

Min. System Temp. Without Refrigerated Dryer: 86°F (30°C)
System Pressure: 102 psig (7 bar g)
(For conditions other than those shown, e.g. higher ambient temperatures, please contact Parker Zander.)

No Refrigerated Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s
Rotary Screw, Vane	ES2100	43	1.2	74	20	36	1.0	62	17	30	0.9	51	14
	ES2150	124	3.5	211	59	106	3.0	179	50	86	2.4	146	40
	ES2200	191	5.4	325	90	162	4.6	276	77	132	3.7	224	62
	ES2300	268	7.6	456	127	225	6.4	383	106	185	5.2	314	87
	ES2400	535	15.1	909	252	450	12.7	764	212	370	10.5	628	174
	ES2500	1062	30.1	1804	501	900	25.5	1530	425	734	20.8	1247	346
	ES2600	2113	59.8	3590	997	1800	51.0	3057	849	1461	41.4	2482	689

Refrigerated Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s
Rotary Screw, Vane	ES2100	33	0.9	55	15	27	0.8	46	13	22	0.6	38	10
	ES2150	93	2.6	158	44	79	2.2	134	37	64	1.8	109	30
	ES2200	143	4.1	243	67	122	3.4	207	57	99	2.8	168	47
	ES2300	201	5.7	341	95	169	4.8	286	79	138	3.9	235	65
	ES2400	400	11.3	680	189	337	9.5	572	159	277	7.8	470	130
	ES2500	795	22.5	1351	375	674	19.1	1145	318	549	15.6	934	259
	ES2600	1582	44.8	2687	756	1347	38.1	2288	635	1093	31.0	1858	516

System Conditions

Ambient Temperature at Compressor Inlet: 95°F (35°C)
Relative Humidity: 85%
Compressor Discharge Temperature: 113°F (45°C)
Refrigerated Dryer Dewpoint if Fitted: 35°F (2°C)

Min. System Temp. Without Refrigerated Dryer: 104°F (40°C)
System Pressure: 102 psig (7 bar g)
(For conditions other than those shown, e.g. higher ambient temperatures, please contact Parker Zander.)

No Refrigerated Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s
Rotary Screw, Vane	ES2100	16	0.5	28	8	14	0.4	23	6	11	0.3	19	5
	ES2150	47	1.3	80	22	40	1.1	68	19	33	0.9	55	15
	ES2200	73	2.1	123	34	62	1.7	105	29	50	1.4	85	24
	ES2300	102	2.9	173	48	85	2.4	145	40	70	2.0	119	33
	ES2400	203	5.7	345	96	171	4.8	290	80	140	4.0	238	66
	ES2500	403	11.4	684	190	341	9.7	580	161	278	7.9	473	131
	ES2600	801	22.7	1361	378	682	19.3	1159	322	554	15.7	941	261

Refrigerated Dryer Installed in System		Oil Type											
		Band A Turbine, Additive Free				Band B Mineral, PAO, TMP, PE				Band C Diesters, Triesters, PAG			
Compressor Type	Model	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s	cfm	m³/min	m³/hr	L/s
Rotary Screw, Vane	ES2100	13	0.4	23	6	11	0.3	19	5	9	0.3	16	4
	ES2150	38	1.1	64	18	32	0.9	55	13	26	0.7	45	12
	ES2200	58	1.7	99	27	50	1.4	84	23	40	1.1	69	19
	ES2300	82	2.3	139	39	69	1.9	117	32	56	1.6	96	27
	ES2400	163	4.6	278	77	137	3.9	234	65	113	3.2	192	53
	ES2500	324	9.2	551	153	275	7.8	467	130	224	6.4	381	106
	ES2600	645	18.3	1097	305	550	15.6	934	259	446	12.6	758	210

For systems using 1 or 2 stage piston/reciprocating compressors multiply compressor flow by 1.4 and select a separator from screw compressor flow rates shown, ensuring due consideration is given to oil type. For 3 or 4 stage piston/reciprocating compressors, please contact Parker Zander.

Complete range of competitor interchange oil/water separator maintenance kits available including Beko, Hankison, MotivAir, Kaeser, Ultrafilter, Quincy, ASP & Wortman.



Beko Condensate Systems

Code No	To Suit Separator Models
PDHR-OWB1	Alternative Maintenance Kit to suit Owamat 1
PDHR-OWB1	Alternative Maintenance Kit to suit Owamat 2
PDHR-OWB4	Alternative Maintenance Kit to suit Owamat 3
PDHR-OWB5	Alternative Maintenance Kit to suit Owamat 4
PDHR-OWB6	Alternative Maintenance Kit to suit Owamat 5
PDHR-OWB8	Alternative Maintenance Kit to suit Owamat 6

Ultrafilter

Code No	To Suit Separator Models
PDHR-OWU5	Alternative Carbon Bag Kit to suit Super Plus 5
PDHR-OWU10	Alternative Carbon Bag Kit to suit Super Plus 10
PDHR-OWU15	Alternative Carbon Bag Kit to suit Super Plus 15
PDHR-OWU30	Alternative Carbon Bag Kit to suit Super Plus 30
PDHR-OWU60	Alternative Carbon Bag Kit to suit Super Plus 60
PDHR-OWU120	Alternative Carbon Bag Kit to suit Super Plus 120
PDHR-OWU240	Alternative Carbon Bag Kit to suit Super Plus 240
PDHR-FSC5	Foam Service Kit to suit UFS 5
PDHR-FSC10	Foam Service Kit to suit UFS 10
PDHR-FSC15	Foam Service Kit to suit UFS 15
PDHR-FSC30	Foam Service Kit to suit UFS 30
PDHR-FSC60	Foam Service Kit to suit UFS 60

Quincy

Code No	To Suit Separator Models
PDHR-OWU5	Alternative Carbon Bag Kit to suit QIOW05
PDHR-OWU10	Alternative Carbon Bag Kit to suit QIOW0010
PDHR-OWU15	Alternative Carbon Bag Kit to suit QIOW0015
PDHR-OWU30	Alternative Carbon Bag Kit to suit QIOW0030
PDHR-OWU60	Alternative Carbon Bag Kit to suit QIOW0060
PDHR-OWU120	Alternative Carbon Bag Kit to suit QIOW0120
PDHR-OWU240	Alternative Carbon Bag Kit to suit QIOW0240

Wortman

Code No	To Suit Separator Models
PDHR-OWW1	Alternative Carbon Bag Kit to suit Drukomat 1
PDHR-OWW2	Alternative Carbon Bag Kit to suit Drukomat 2-15
PDHR-OWW6	Alternative Carbon Bag Kit to suit Drukomat 30
PDHR-OWW7	Alternative Carbon Bag Kit to suit Drukomat 60

Hankison

Code No	To Suit Separator Models
PDHR-OWW1	Alternative Maintenance Kit to suit HSMK-1
PDHR-OWW2	Alternative Maintenance Kit to suit HSMK-2
PDHR-OWW2	Alternative Maintenance Kit to suit HSMK-3
PDHR-OWW2	Alternative Maintenance Kit to suit HSMK-4
PDHR-OWW5	Alternative Maintenance Kit to suit HSMK-5
PDHR-OWW6	Alternative Maintenance Kit to suit HSMK-6
PDHR-OWW7	Alternative Maintenance Kit to suit HSMK-7

Kaeser

Code No	To Suit Separator Models
PDHR-OWU5	Alternative Maintenance Kit to suit MK-75
PDHR-OWU10	Alternative Maintenance Kit to suit MK-150
PDHR-OWU15	Alternative Maintenance Kit to suit MK-260
PDHR-OWU30	Alternative Maintenance Kit to suit MK-520
PDHR-OWU60	Alternative Maintenance Kit to suit MK-2060
PDHR-OWU120	Alternative Maintenance Kit to suit MK-2060D
PDHR-OWU240	Alternative Maintenance Kit to suit MK-2060Q

MotivAir

Code No	To Suit Separator Models
PDHR-OWW1	Alternative Carbon Bag Kit to suit OSW01
PDHR-OWW2	Alternative Carbon Bag Kit to suit OSW02
PDHR-OWW2	Alternative Carbon Bag Kit to suit OSW03
PDHR-OWW2	Alternative Carbon Bag Kit to suit OSW04
PDHR-OWW5	Alternative Carbon Bag Kit to suit OSW05
PDHR-OWW6	Alternative Carbon Bag Kit to suit OSW06
PDHR-OWW7	Alternative Carbon Bag Kit to suit OSW07
PDHR-OWW8	Alternative Carbon Bag Kit to suit OSW08

ASP

Code No	To Suit Separator Models
PDHR-OWA15	Alternative Carbon Bag Kit to suit ASP-CE15
PDHR-OWA30	Alternative Carbon Bag Kit to suit ASP-CE30
PDHR-OWA60	Alternative Carbon Bag Kit to suit ASP-CE60
PDHR-OWA120	Alternative Carbon Bag Kit to suit ASP-CE120
PDHR-OWA180	Alternative Carbon Bag Kit to suit ASP-CE180
PDHR-OWA240	Alternative Carbon Bag Kit to suit ASP-CE240
PDHR-OWA20	Alternative Carbon Bag Kit to suit PS20/CE20
PDHR-OWA40	Alternative Carbon Bag Kit to suit PS40/CE40
PDHR-OWA90	Alternative Carbon Bag Kit to suit PS90/CE90