

Condensate treatment systems

OSC oil-water separator



Effective and effortless condensate treatment

An oil-water separator removes the oil from your compressor condensate before it can enter the sewage system. However, too many oil-water separators offer subpar quality and minimal ease of use. Atlas Copco's OSC series allows you to comply with local regulations and to protect the environment with unmatched filtration precision and zero-hassle maintenance.

It's the law!

Condensate treatment is not only the responsible thing to do, in most countries it's the law! Non-compliance can result in hefty fines.



High purity

- Dual-stage filtration with polypropylene and activated carbon removes a wider range of oil types.
- Organoclay cartridges available for stronger emulsions.
- Minimal oil content at outlet, as low as 5 ppm if required.
- Test outlet verifies filtration performance.



Easy to use & service

- Easily removable filter bags and cartridges simplify and shorten maintenance.
- Long service interval of 4,000 hours.
- Service indicator signals the polypropylene filter is saturated.
- Overflow indicator monitors correct water passage.



A complete range

To ensure maximum flexibility, the OSC comes in different types and sizes:

- OSC 12-15 are small single-use units. The larger units are serviceable.
- OSC 12-625 are two-stage units, while the OSC 1250-2500 are three-stage units.
- OSC 2500 uses a flow divider to evenly split the flow between two units.

Highly efficient multi-stage filtration

1. The condensate enters the unit via one single or multiple inlets. It passes through a diffuser and depressurizes in the expansion chamber. The diffuser removes bigger solid particles from the condensate so that these cannot compromise the filter media.
2. The oil-water mixture continues to the first filter chamber. It seeps through the polypropylene filter, which adsorbs the oil, but not the water.
3. The condensate remains in the chamber for a while, starting a secondary, natural filtration as the remaining free oil floats to the top and is adsorbed by the filter bag.
4. Significantly cleaner condensate flows into the second chamber.
5. A removable cartridge, filled with activated carbon (or organoclay for stronger emulsions), separates the remaining oil droplets from the condensate.
6. Clean condensate exits from the removable cartridge with almost no residual oil content, allowing for safe discharge into the sewer system.



Technical specifications

Model	Max capacity - Mild climate without dryer & filters			Max capacity - Mild climate with dryer & filters			Dimensions					
	l/s	m ³ /hr	cfm	l/s	m ³ /hr	cfm	Depth	Width	Height	Weight	Connections	
							mm (in)	mm (in)	mm (in)	kg (lb)	Condensate inlet	Water outlet
OSC 12	15	54	32	12	43	25	250 (10)	147 (6)	216 (9)	1.2 (2.6)	1/4" (6mm)	3/8" (10mm)
OSC 25	31	113	66	25	90	53	250 (10)	147 (6)	216 (9)	1.5 (3.4)	1/4" (6mm)	3/8" (10mm)
OSC 50	63	225	132	50	180	106	390 (15)	278 (11)	428 (17)	5.8 (12.7)	2 x 1/2"	1/2"
OSC 85	106	383	225	85	306	180	397 (16)	286 (11)	507 (20)	7.7 (16.9)	2 x 1/2"	1/2"
OSC 170	213	765	450	170	612	360	490 (19)	396 (16)	576 (23)	13.1 (28.9)	2 x 3/4"	3/4"
OSC 300	375	1350	795	300	1080	636	583 (23)	446 (18)	721 (28)	25.3 (55.7)	2 x 3/4"	3/4"
OSC 625	781	2813	1655	625	2250	1324	692 (27)	568 (22)	970 (38)	45.1 (99.4)	2 x 3/4"	3/4"
OSC 1250	1563	5625	3311	1250	4499	2648	975 (38)	782 (31)	1000 (39)	86 (189.5)	2 x 3/4"	3/4"
OSC 2500	3125	11250	6621	2500	8998	5296	975 (38)	1600 (63)	1000 (39)	171.9 (379.1)	2 x 3/4"	3/4"

Reference conditions

- Relative air humidity: 60%
- Air inlet temperature: 25°C (77°F)
- Running hours per day: 12 hours
- Effective working pressure: 7 bar (102 psi)

Options

- Manifold for multiple condensate inlets
- Wall mounting kit (for sizes 12-25)
- Test capsule (standard for sizes 12-25)
- Drip tray
- Electronic alarm

Correction factors

Relative humidity	%	50	60	70	80	90		
	Correction factor		1.10	1.00	0.85	0.74	0.66	
Ambient temperature	°C	15	20	25	30	35	40	
	Correction factor	1.33	1.17	1.00	0.76	0.50	0.30	
Running hours per day	hours	12	14	16	18	20	22	24
	Correction factor	1	0.86	0.75	0.67	0.6	0.55	0.5