



# Chicago Pneumatic



**CPP  
condensate  
separator  
series**

**High-performance products.  
Designed for you!**

# CPP Condensate separator series

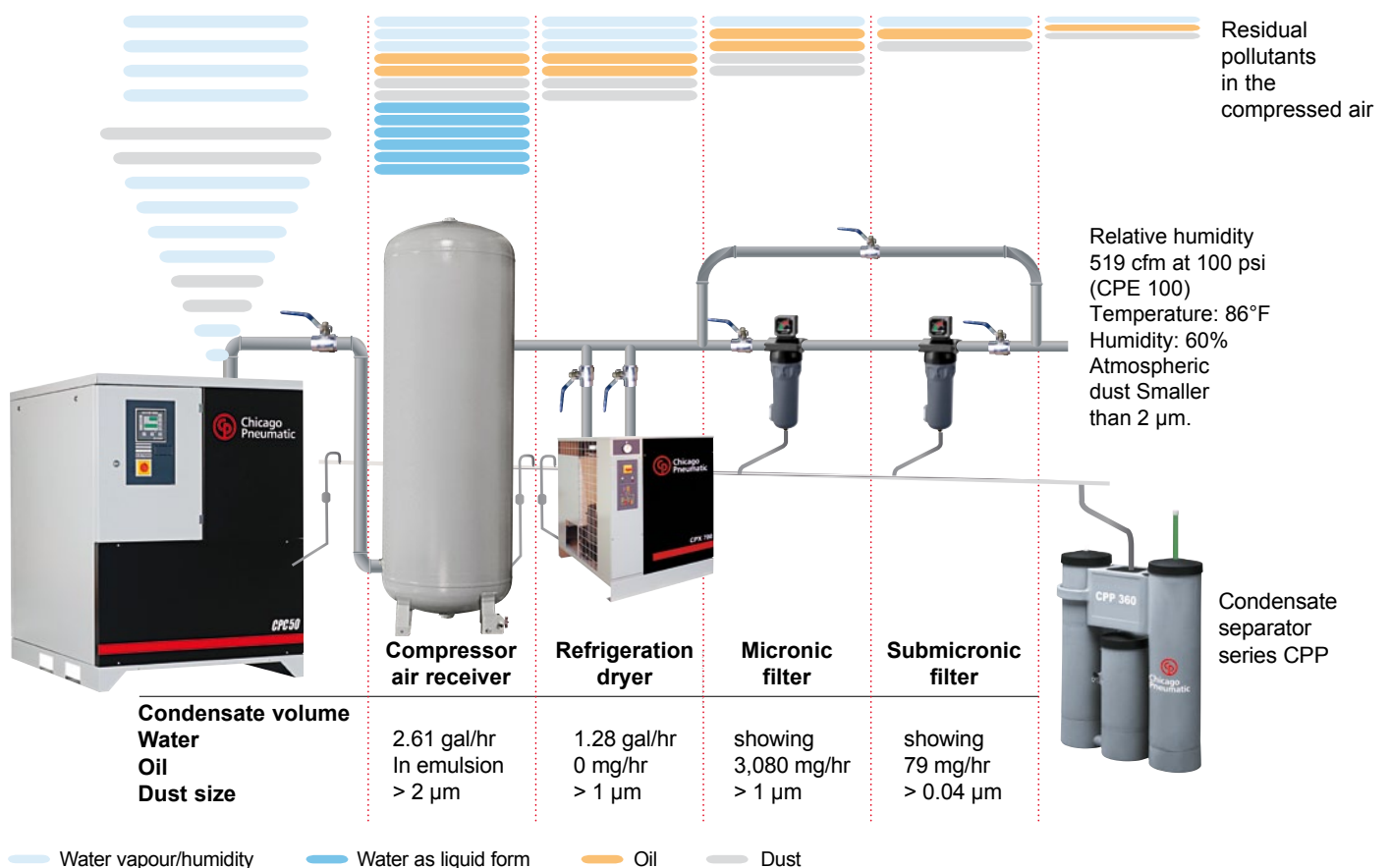
## Removal of contaminants in compressed air condensate

Compressed air contains dust particles and humidity from the environment, as well as compressor oil. At the end of the compression process, when the air has cooled down, contaminated condensate generated. Current legislation requires condensate treatment before disposal.

During the compression process, contaminants such as dust particles and water vapour from the atmospheric air are mixed with the hot oil. The Chicago Pneumatic OWS range enables the separation and removal of this contamination, so the Chicago Pneumatic CPP oil-water separator (OWS) series enables the water can be simply discharged on site.

Chicago Pneumatic CPP solution allows you to minimize your compressed air waste treatment costs and care for the environment all at once. Be fully compliant now with the most stringent environmental regulations at minimal operation cost with our easy to install solution.

## Condensate volume in compressed air



This drawing illustrates that during the air treatment process, 4.07 gal/hr of water per hour, plus dust, and 3,159 mg/hr of oil are produced.

The CPP Condensate Separator will reduce this oil content to 4 mg/gal, almost 14 times less.

With such a small residual amount, it is possible to discharge the condensate, with no risk to the environment.

# Simple concept Compact and easy to use

The patented Chicago Pneumatic CPP condensate separator technology minimizes the collection and treatment cost of compressed air waste products.

Compatible with all compressed air condensate, this universal system can easily be integrated into any compressed air installation.

Two filtration stages (oleophilic filtration and activated carbon filtration) give a guarantee of minimum oil content in the condensate before disposal.



## Universal system that controls residual oil level

The Chicago Pneumatic CPP range of separators eliminates oil through multi stage filtration rather than the conventional gravity systems which have limitations on the type of condensate that can be treated.

- 1- Collection of any type of condensate including a mix of different oils.
- 2- Condensates are collected through mufflers located in an expansion chamber where first stage separation takes place by depressurization.
- 3- Water/oil emulsion enters column A and passes through an oleophilic media, made of oil absorbing fibres which allow water to pass through.
- 4- The oleophilic filter floats in column A. This is advantageous for absorbing residual oil floating on the surface.
- 5- The weight of the filter increases as oil saturation increases. Oil progressively begins to reach the service indicator. Part of the filter that is not

As a result, the CPP separator capacity is not linked to the type of emulsion collected since it can treat the same volume of condensate whether saturated with mineral oil, semi-synthetic oil or polyglycol.

- saturated keeps in contact with the water surface.
- 6- When the filter is totally saturated, there is indication that the filter needs to be changed.
- 7- Only clean condensate from the bottom of column A flows to column B.
- 8- Column B contains activated carbon, and absorbs the remaining oil in the condensate. The large capacity of the system prevents any risk of spillage in case of blockage of the system or if the system produces excessive quantities of condensate.
- 9- Oil content is approximately 4 mg/gal, at reference conditions, at the outlet, a level that allows disposal of the condensate without risk to the environment.

# A clean way to eliminate condensate

- **A universal system**

By using oleophilic oil filtration, the system is able to deal with an extensive range of condensates, and pre analysis of the condensate is unnecessary.

Oleophilic filtration captures the oil even in an unstable emulsion, which cannot normally be separated using gravity separation.

- **Easy to use**

CPP condensate separators are resistant to vibration, shock and splashes that might occur during condensate injection.

This treatment system is therefore compatible with all types of drains (timer, level detection...).

- **Reliable design**

Large volume of the expansion chamber ensures reduced emulsion of condensate.

Oil is captured in the oleophilic filter. An oil can is therefore not required: oil collection is safe and reliable.

- **Condensate disposal of controlled quality**

Residual oil is captured in the filter which is a guarantee of constant quality of the condensate even in an unstable system (condensate emulsion).

- **Simple, low-cost maintenance**

A service indicator notifies the user to change the filter before it becomes saturated.





# Technical data



Treatment capacity in an installation **with dryer**.  
Condensates are collected from compressor(s), air receiver(s),  
dryer(s), filter(s) for a daily operation of 12 hours.

	Cold climate			Temperate climate			Hot climate	
Ambient temperature (°F)	40	50	60	68	77	86	95	104
Relative humidity (%)	60			60			70	
in cfm								
CPP 40	291	198	139	101	74	56	36	28
CPP 100	789	537	378	274	201	151	99	77
CPP 150	1204	820	577	418	307	231	151	118
CPP 360	2949	2008	1414	1023	752	564	371	288
CPP 615	5025	3423	2410	1743	1282	962	632	490
CPP 850	6852	4667	3287	2377	1748	1311	862	669
CPP 1200	9801	6676	4700	3400	2500	1875	1232	956
CPP 2430	19602	13351	9401	6801	5001	3750	2466	1913

Treatment capacity in an installation **without dryer**.  
Condensates are collected from compressor(s), air  
receiver(s), filter(s) for a daily operation of 12 hours.



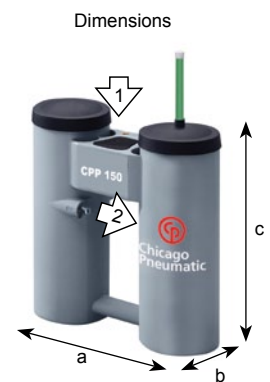
	Cold climate			Temperate climate			Hot climate	
Ambient temperature (°F)	40	50	60	68	77	86	95	104
Relative humidity (%)	60			60			70	
in cfm								
CPP 40	374	255	180	129	95	72	47	36
CPP 100	980	667	470	340	250	188	123	95
CPP 150	1454	990	697	504	371	278	183	142
CPP 360	3613	2461	1733	1254	922	692	454	353
CPP 615	6312	4300	3028	2190	1610	1208	794	616
CPP 850	8472	5770	4063	2939	2161	1621	1065	827
CPP 1200	12085	8231	5796	4193	3083	2313	1520	1180
CPP 2430	24171	16463	11592	8385	6166	4624	3040	2358

Capacity based on a residual oil content of 4 mg/gal.

Service (hrs)	8	10	12	14	16	18	20	22	24
Correction factor	1.50	1.20	1.00	0.86	0.75	0.67	0.60	0.55	0.50

Relative humidity (%)	20	30	40	50	60	70	80	90	
Correction factor	3.38	2.12	1.54	1.21	1.00	0.85	0.74	0.66	
Oil content of 3 mg/gal	Multiply below capacity by 2/3								
Condensate made of polyglycol	Above capacity								

	Dimensions (mm)			Weight kg	Connections (G/NPT)	
	a	b	c		Inlet	Outlet
CPP 40	470	165	600	4	1 x 1/2	1 x 1/2
CPP 100	680	255	750	13	2 x 1/2	1 x 1/2
CPP 150	680	255	750	15	2 x 1/2	1 x 3/4
CPP 360	750	546	900	25	2 x 3/4	1 x 3/4
CPP 615	750	546	1030	26	2 x 3/4	1 x 3/4
CPP 850	945	650	1100	28	2 x 3/4	1 x 3/4
CPP 1200	945	695	1100	30	2 x 3/4	1 x 3/4
CPP 2430	945	1185	1100	60	2 x 3/4	1 x 3/4

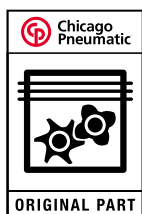




## Over 100 years of experience

Since 1901 the Chicago Pneumatic name has represented high-performance tools and equipment designed for an extensive range of applications. Today, Chicago Pneumatic has a global reach, with local customer centers around the world. Chicago Pneumatic tools and air compressors are tailored to the needs of the industrial, vehicle service, and construction markets. Every day we develop and manufacture new products that are meant to meet your demands not only today, but tomorrow as well.

To learn more about our extensive range of tools, hydraulic attachments, industrial and portable compressors, accessories and workshop equipment, please visit [www.cp.com](http://www.cp.com).



## Original parts. Your quality assurance.

The 'original part' identification confirms that these components passed our strict test criteria.

All parts are designed to match the compressor and are approved for use on the specified compressor.

They have been thoroughly tested to obtain the highest level of protection, extending the compressors' lifetime and keeping the cost of ownership to an absolute minimum. No compromises are made on reliability. The use of 'original part' certified quality components helps ensure reliable operation and will not impact the validity of your warranty, unlike other parts. Look for your quality assurance.



DISTRIBUTED BY

