FOCUSED ON
AIR PURIFICATION

Parker Carbon Tower | CAT Series

Parker

ENGINEERING YOUR SUCCESS.

FOCUSED ON **CLEAN AIR**

Carbon towers purify pre-dried industrial compressed air by removing residual oil vapors and odors from the compressed air system. These low maintenance units are constructed in a compact manner and designed to be free-standing units. They are supplied with a pressure gauge and oil indicator.

Pre-dried compressed air flows from top to bottom through a single vessel containing high-quality activated carbon. Any remaining oil-aerosols and oil vapors, including odors and tastes, are removed by the active surface area of the highly porous activated carbon to produce high quality, clean compressed air.

Finally, the treated compressed air exits an after-filter (sold separately) rated for solid particulates removal into the downstream compressed air network. The use of an oil-indicator tube supplied as standard allows quality checks to be carried out periodically for verifying air purification. The lifetime of the activated carbon filling can vary and is dependent on the contamination type, quantity, and the relative humidity of the supplied compressed air. However, the adsorber bed can last up to an excess of 8,000 hours when properly maintained.

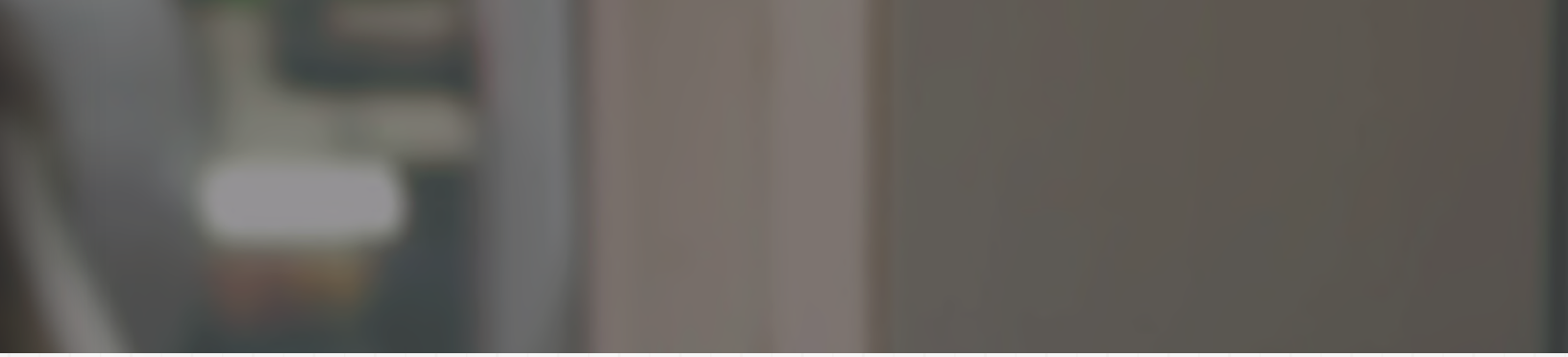
Parker Carbon Tower

Benefits/Features

- Low maintenance
- Separate fill and drain ports allow for quicker carbon replacement
- Stand alone units
- Includes pressure gauge and oil indicator
- ASME coded vessels

Typical Applications

- Food and beverage
- Pharmaceutical - manufacturing and processing
- N2 membrane protection
- Anywhere air purity is critical



Product Specification

Ordering and Performance Data

Model	Flow Rate scfm (m^3/h)	Port Size	Max Pressure psi g (bar g)	Max Temp. °F (°C)	Activated Carbon Amount (lbs)	Number of 55 lbs. bags required (P/N TP3040-55)
CAT100	100 (170)	1" NPT	232 (16)	122 (50)	31	1
CAT250	250 (425)	1 1/2" NPT	232 (16)	122 (50)	78	2
CAT375	375 (638)	2" NPT	232 (16)	122 (50)	116	3
CAT500	500 (850)	2" NPT	232 (16)	122 (50)	154	3
CAT750	750 (1274)	2" NPT	232 (16)	122 (50)	233	5
CAT1000	1000 (1700)	3" NPT	232 (16)	122 (50)	310	6

- For larger flow rates, please consult factory. ISO 8573-1:2010 Class 1 met when recommended filtration is used.

Operating Range

Site Selection	Frost-free indoor installation in a non-hazardous environment
Ambient Temperature	35° to 122°F (1.5 to 50°C)
Maximum Compressed Air Inlet Temperature	122°F
Maximum Operating Pressure	232 psig
Medium	Compressed air and gaseous nitrogen
Performance	Outlet oil levels .003 PPM (.003mg/m^3) w/ .01mg/m^3 inlet concentration (3.33:1 reduction)

Note

- Not for breathing air.
- Performance based on stated flows
- Performance will degrade when carbon bed reaches saturation

Materials of Construction

Pressure Vessels	Carbon steel, welded, ASME
Seals	Nitrile
Adsorbing Material	100% Activated Carbon

Recommended Filtration Requirements

Pre-filter	ISO8573-1:2010 Class 1, 0.01 micron, 0.01 mg/m^3 carryover
After-filter	Solid particulates 1.0 micron

Dimensions and Weight

Model	Height in (mm)	Width in (mm)	Weight lb (kg)
CAT100	69.25 (1758.9)	11.5 (292.1)	147 (67)
CAT250	72.63 (1844.8)	15.75 (400.1)	265 (120)
CAT375	78.75 (2000.2)	15.50 (393.7)	297 (135)
CAT500	72.25 (1835.1)	17.38 (441.4)	307 (139)
CAT750	72.75 (1847.8)	20.00 (508.0)	388 (176)
CAT1000	85.38 (2168.6)	24.00 (610.0)	539 (244)

- Weight is empty vessel only, activated carbon shipped loose.

Correction Factors

Pressure		Temperature			
psi	bar	95°F (35°C)	104°F (40°C)	113°F (45°C)	122°F (50°C)
73	5	0.75	0.64	0.56	0.38
87	6	0.89	0.76	0.67	0.45
102	7	1.00	0.85	0.75	0.50
116	8	1.13	0.92	0.81	0.54
131	9	1.26	1.07	0.95	0.63
145	10	1.31	1.11	0.98	0.65
160	11	1.36	1.16	1.02	0.68
174	12	1.49	1.27	1.12	0.74
189	13	1.62	1.38	1.22	0.81
203	14	1.70	1.45	1.28	0.85
218	15	1.79	1.52	1.34	0.90

- Design conditions are 100 PSIG and 95°F

Sizing Example

Actual Flow	600 scfm
Min Pressure	73 psi
Max Inlet Temp	104°F
Factor from Table	0.64

$$\frac{\text{Actual Flow}}{\text{Factor}}$$

$$\frac{600 \text{ scfm}}{0.64} = 938$$

Select: CAT1000

State of California ONLY
WARNING: Proposition 65
The products described herein can expose you to chemicals known to the State of California to cause cancer or reproductive harm.
For more information: www.P65Warnings.ca.gov

Worldwide Filtration Manufacturing Locations

North America

Compressed Air Treatment

Industrial Gas Filtration and Generation Division
Lancaster, NY
716 686 6400
www.parker.com/igfg

Haverhill, MA
978 858 0505
www.parker.com/igfg

Engine Filtration

Racor
Modesto, CA
209 521 7860
www.parker.com/racor

Holly Springs, MS
662 252 2656
www.parker.com/racor

Hydraulic Filtration

Hydraulic & Fuel Filtration
Metamora, OH
419 644 4311
www.parker.com/hydraulicfilter

Laval, QC Canada
450 629 9594
www.parkerfarr.com

Velcon
Colorado Springs, CO
719 531 5855
www.velcon.com

Process Filtration

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SciLog
Oxnard, CA
805 604 3400
www.parker.com/processfiltration

Water Purification

Village Marine, Sea Recovery, Horizon Reverse Osmosis
Carson, CA
310 637 3400
www.parker.com/watermakers

Europe

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Hiross Airtek
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+49 2054 9340
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Padova, Italy
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Engine Filtration & Water Purification

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Racor Research & Development
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Process Filtration

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