

ACTIVATED CARBON TOWER

کاربرد در صنایع:

- پزشکی
- دارویی
- غذایی
- الکترونیک
- بیوتکنولوژی

- محدوده فشار کاری: ۱۳-۴ بار (قابلیت طراحی و ساخت coal Towerهای با فشار کاری بیشتر نیز وجود دارد)
- محدوده دمای کاری برای هوای ورودی: ۵۰-۱۰۵ درجه سانتی گراد
- طراحی و ساخت بر اساس استانداردهای روز اروپا
- حذف روغن از هوا تا کمتر از 0.005ppm
- جنس بدنه: فولاد کربنی (در صورت نیاز قابلیت استفاده از فولاد ضدزنگ نیز وجود دارد).

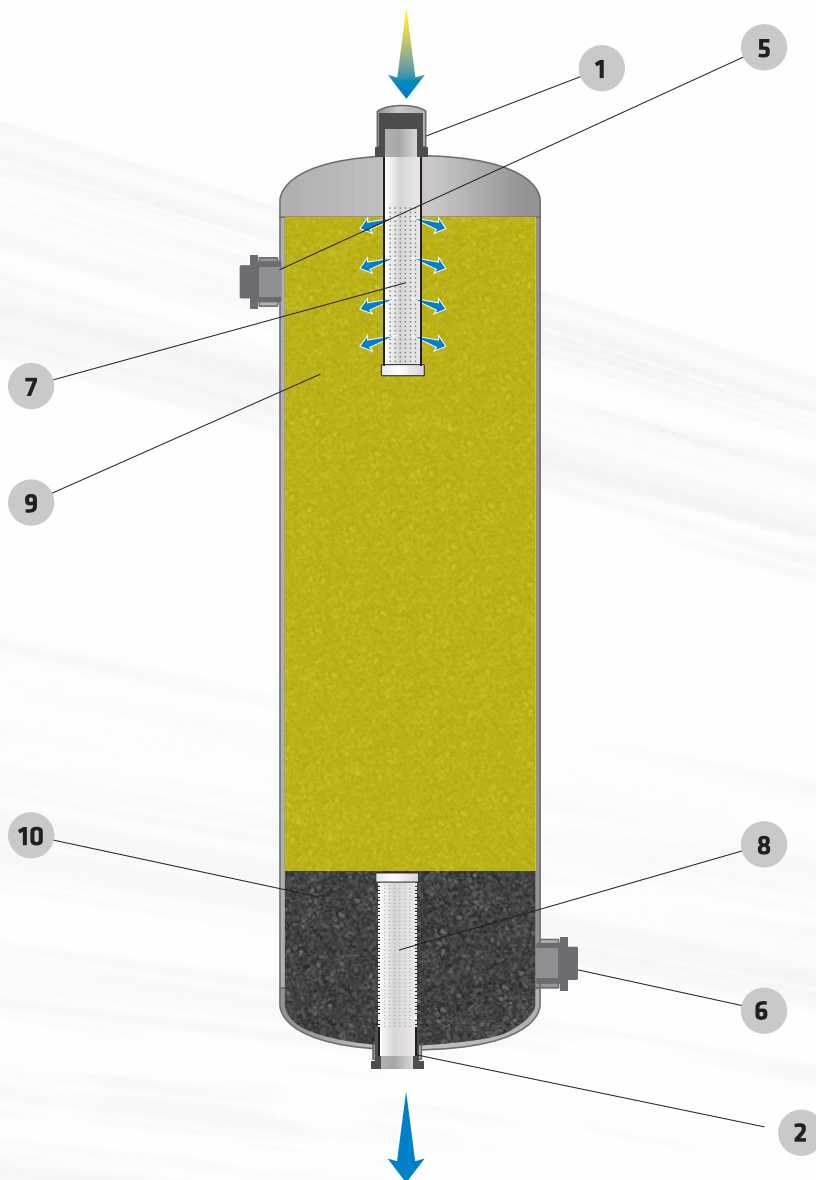


HYCT SERIES

ACTIVATED CARBON TOWER

Operating pressure range **4-13 bar**

Temperature oper. range **1.5 to 50 °C**



- 1 Compressed air inlet (oily air)
- 2 Compressed air outlet (clean air)
- 5 Activated carbon filling aperture
- 6 Activated carbon discharging aperture
- 7 Inlet flow distributor
- 8 Outlet flow distributor
- 9 Saturated activated carbon granulate
- 10 Non-saturated activated carbon granulate



Functionality

HYCT - activated carbon towers are intended for separating oil vapours from compressed air (dry type separation).

HYCT is made of high quality carbon steel pressure vessel, filled with activated carbon granulate.

Flow distributors are inserted into granulate. Their purpose is to ensure uniform distribution of air flow through activated carbon bed. During air flow oil vapours as well as some other hydrocarbons are separated due to adsorption process.

Super fine coalescing filter is required upstream HYCT and 1 μm dust filter is recommended downstream to intercept activated carbon dust.

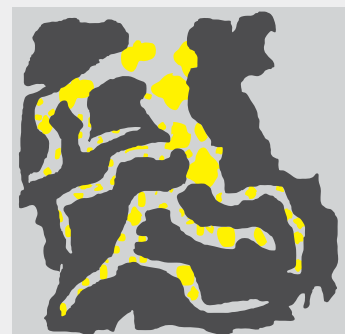
High pressure version is available on request.

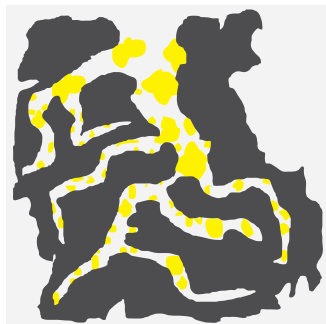


Activated carbon

Activated carbon is adsorption medium with low volume pores that increase the surface area available for adsorption or chemical reactions.

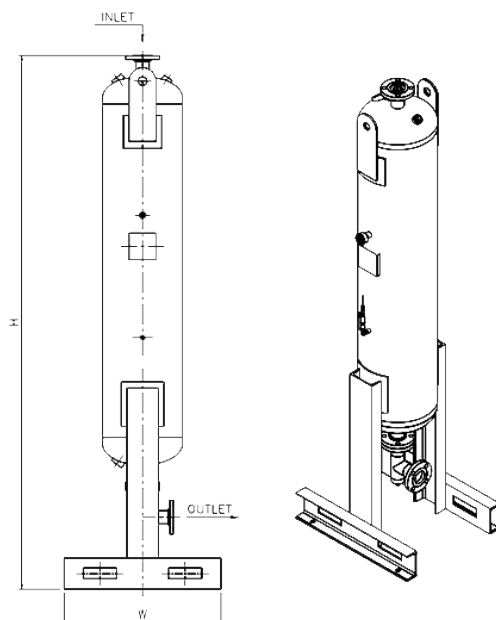
Due to its high degree of micro porosity, just one gram of activated carbon has a surface area in excess of 500 m^2 , as determined by gas adsorption. An activation level sufficient for useful application may be attained solely from high surface area.





Coal Tower Model	Capacity (m3/min)	Coal Tower Total High (mm)	Volume (lite)
HYCT-70	2	2200	26
HYCT-102	2.8	2200	36
HYCT-125	3.5	2300	45
HYCT-140	3.9	2300	50
HYCT-212	6	2400	77
HYCT-274	7.75	2400	100
HYCT-304	8.5	2400	110
HYCT-490	14	2450	180
HYCT-600	16.5	2500	208
HYCT-726	20	2300	252
HYCT-990	28	2600	350
HYCT-1206	34	3100	425
HYCT-1400	40	3100	500

Minimum Working Pressure	4 barg	58 psig
Maximum Working Pressure	13 barg	188psig
Minimum inlet temperature	1.5°C	35°F
Maximum inlet temperature	50°C	122°F
Minimum ambient temperature	5°C	41°F



Technical Notes

1	Activated carbon towers are manufactured from carbon steel
2	Activated carbon towers are designed and manufactured in accordance with EN13445.
3	Threaded connections are BSP parallel to ISO7/1.
4	Activated carbon must be changed periodically to suit the application, but at least every 6 months.
5	Activated carbon towers must not operate in oil saturated conditions and will not remove certain types of gases including carbon monoxide (CO) and carbon dioxide (CO2) .
6	Activated carbon towers should not be used downstream of heat regenerative dryers.
7	Grade M and S filtration is recommended upstream of activated carbon towers. Grade R filtration is recommended downstream of activated carbon towers.