TAC SERIES

ACTIVATED CARBON TOWER

16 bar
operating pressure

1,5 to 45°C
inlet air temperature range

3/8" to DN125
connections

6 to 6500 Nm³/h
flow rate

RAL 9005
standard colour

DESCRIPTION

TAC activated carbon towers have been developed for separating oil vapours from compressed air (dry type separation).

TAC series is made from high quality carbon steel. Flow distributors ensure uniform distribution of air flow through activated carbon bed. Oil vapours as well as some other hydrocarbons are separated due to adsorption process.

Super fine coalescing filter is required upstream TAC and 1µm dust filter is recommended downstream to intercept activated carbon dust.
High pressure version is available on request.

Stainless steel version available on request.

High pressure version available on request.

TACm

TAC

APPLICATIONS

- Automotive
- Electronics
- Food & beverage
- Chemical
- Petrochemical
- Plastics
- Paint
- General industrial application

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operating pressure range	0-16 bar
temperature oper. range	1,5 to 45 °C

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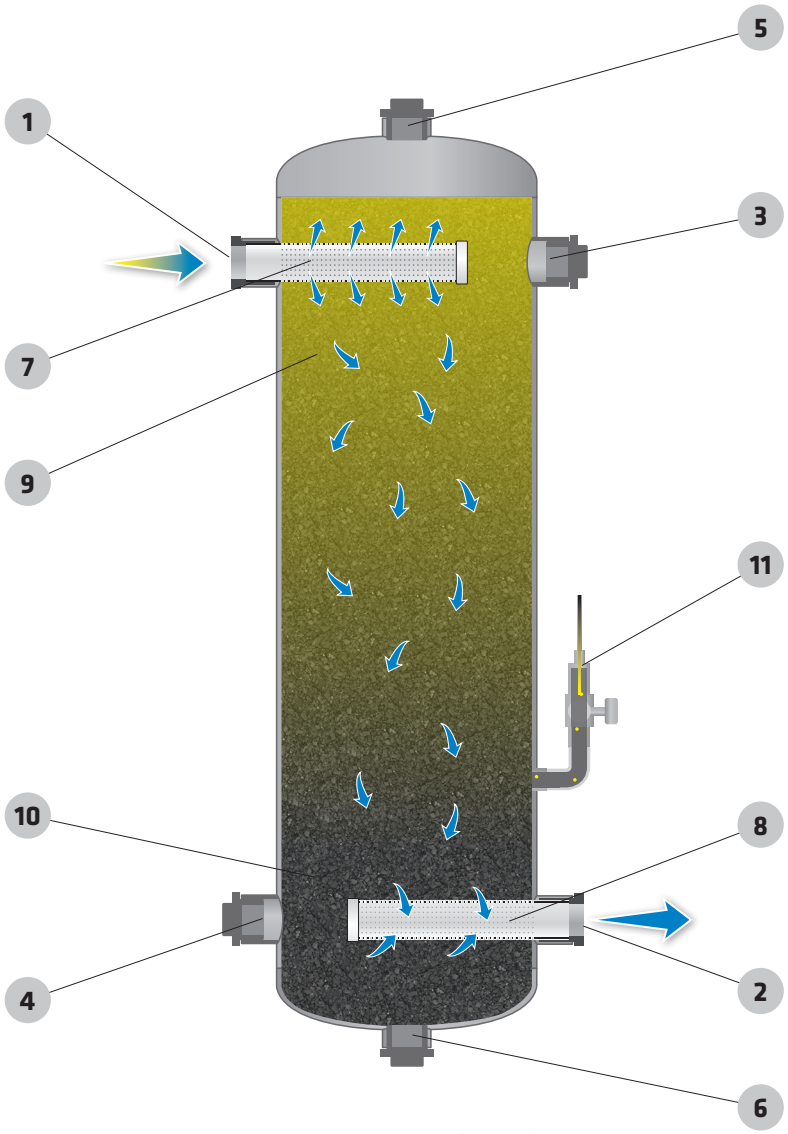
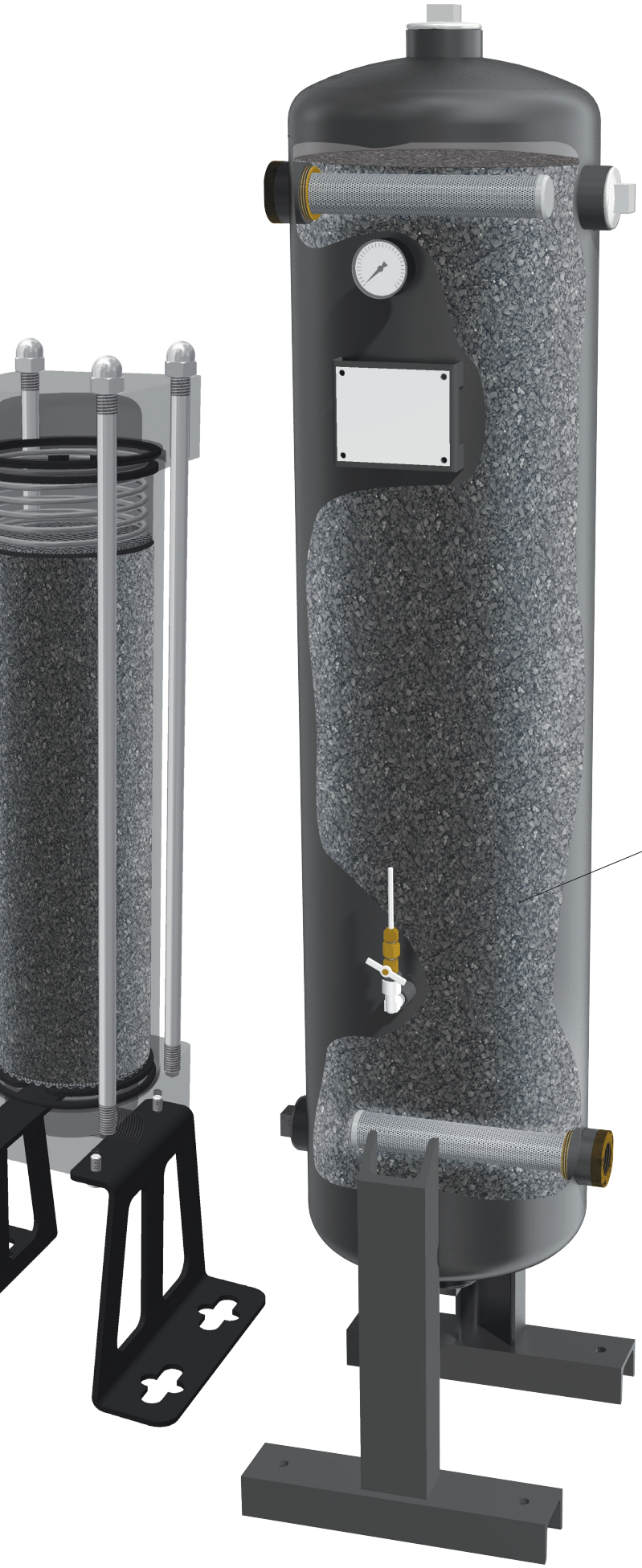
HIGH PRESSURE VERSIONS ARE AVAILABLE ON REQUEST.



1 Compressed air inlet (oily air)
2 Compressed air outlet (clean air)
3 Alternative compressed air inlet (oily air)
4 Alternative 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
11 OCI - oil content indicator



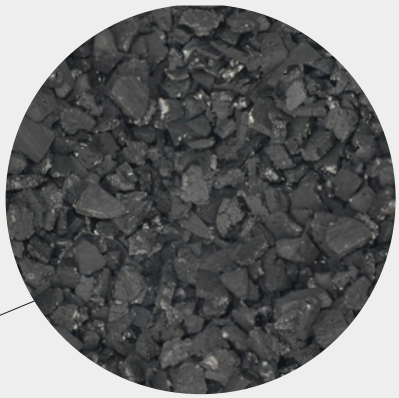
Functionality

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

TAC 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 TAC and 1 µm dust filter is recommended downstream to intercept activated carbon dust.

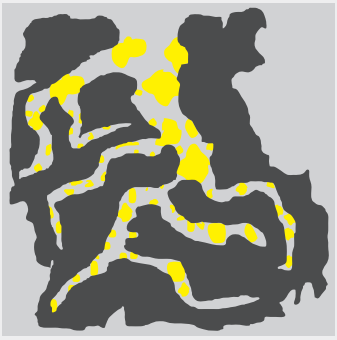
High pressure version is available on request.

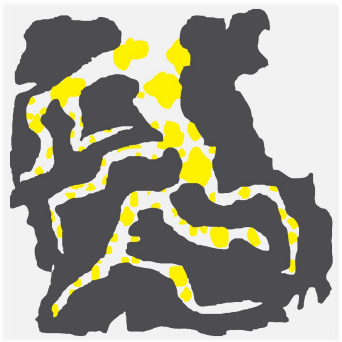


Activated carbon

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

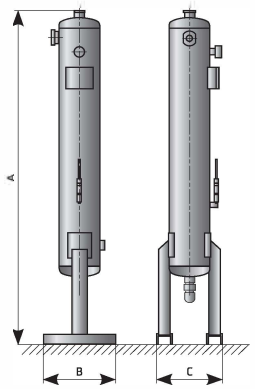
Due to its high degree of microporosity, just one gram of activated carbon has a surface area in excess of 500 m^2, as determined by gas adsorption. An activation level sufficient for useful application may be attained solely from high surface area.





TECHNICAL DATA

Type	Pipe size	Operating pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]			Mass	Cartridge number
		bar	Nm³/h	scfm	A	B	C	kg	
TACm 6	3/8"	16	6	3,5	404	188	100	3,5	1 x ø80
TACm 12	3/8"	16	12	7	638	188	100	5,3	2 x ø80
TACm 23	3/8"	16	24	14,1	1106	188	100	6,5	4 x ø80
TACm 35	3/8"	16	36	21,1	1574	188	100	12	6 x ø80
TACm 56	1/2"	16	60	35,3	1106	270	148	15	4 x ø129
TACm 70	1/2"	16	75	44,1	1340	270	148	18	5 x ø129
TACm 105	1/2"	16	105	61,8	1808	270	148	22	7 x ø129
TAC 110	1"	16	110	86	1522	350	252	45	-
TAC 150	1"	16	150	117	1766	350	252	52	-
TAC 200	1"	16	200	157	1532	400	303	71	-
TAC 250	1"	16	260	204	1784	400	303	83	-
TAC 300	1 1/2"	16	320	251	1551	450	357	97	-
TAC 400	1 1/2"	16	410	321	1798	450	357	114	-
TAC 600	1 1/2"	16	590	462	1893	650	424	160	-
TAC 800	2"	16	770	603	1877	650	468	201	-
TAC 1000	2"	16	1000	784	1961	650	506	242	-
TAC 1200 F	DN50	16	1200	936	2170	550	550	280	-
TAC 1500 F	DN65	16	1500	1170	2210	620	620	355	-
TAC 2000 F	DN65	16	2000	1560	2330	700	700	420	-
TAC 2500 F	DN80	16	2500	1950	2260	760	760	510	-
TAC 3000 F	DN80	16	3000	2340	2400	800	800	595	-
TAC 3750 F	DN100	16	3750	2925	2490	920	920	745	-
TAC 5000 F	DN100	16	5000	3900	2600	1050	1050	960	-
TAC 6500 F	DN125	16	6500	5070	2730	1150	1150	1300	-



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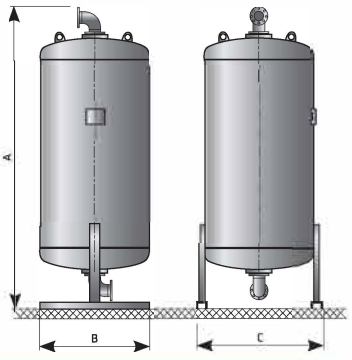

TAC F

quality class - solids (ISO 8573-1)	-
quality class - water (ISO 8573-1)	-
quality class - oils (ISO 8573-1)	0/1
pressure drop - new element-dry [mbar / psi]	20 / 0,29
filter media	act. carbon
residual oil vapour content (nominal) [mg/m³]	<0,003

CORRECTION FACTORS

Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,0	2,13

CORRECTION FACTORS

Operating temperature [°C]	20	25	30	35	40	45
Correction factor	1	0,98	0,97	0,92	0,86	0,75

Replace activated carbon every 12 months or sooner if required. Check residual oil content with oil indicator monthly.