Activated carbon tower

Working pressure: 0 to 12 bar

Operating pressure
16 bar

Inlet air temperature range
3/8" to DN125

Flow rate
6 to 6500 Nm3/h

Standard colour
RAL 9005

DESCRIPTION
TAC activated carbon towers have been developed for separating oil vapeurs 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. Dil vapeurs 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.

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

TACm

TAC

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

APPLICATIONS

- automotive
- electronics
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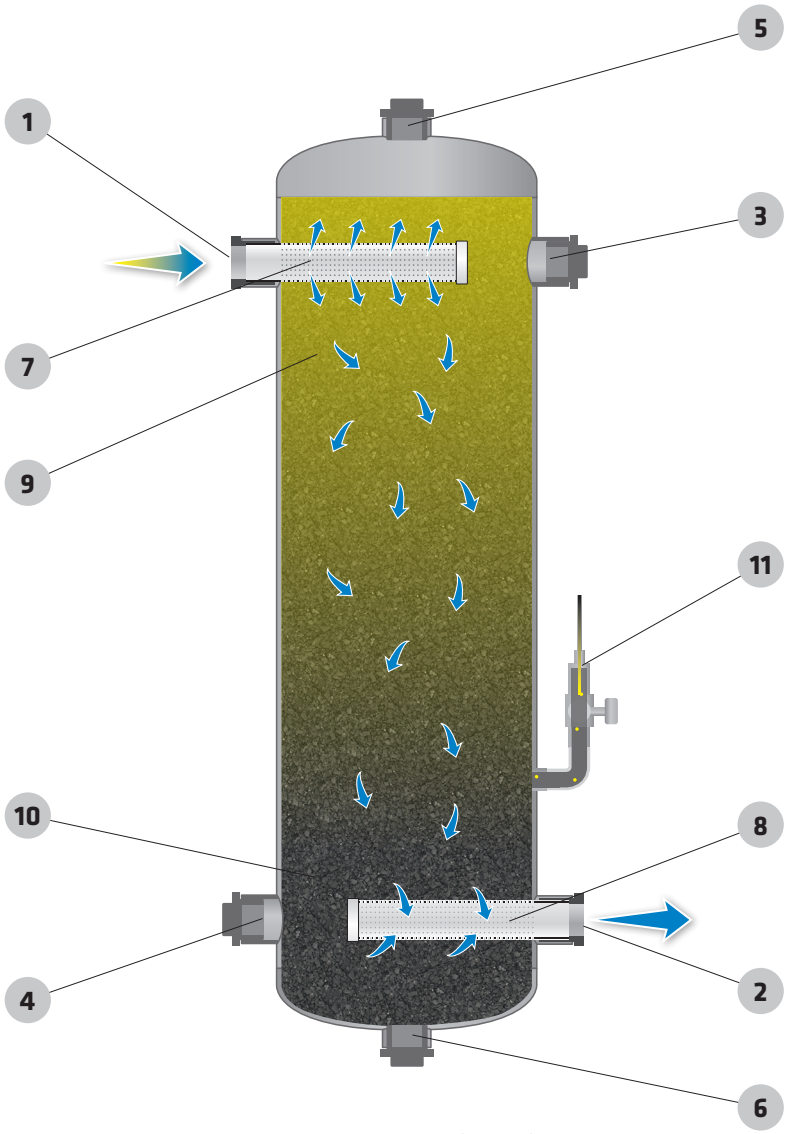
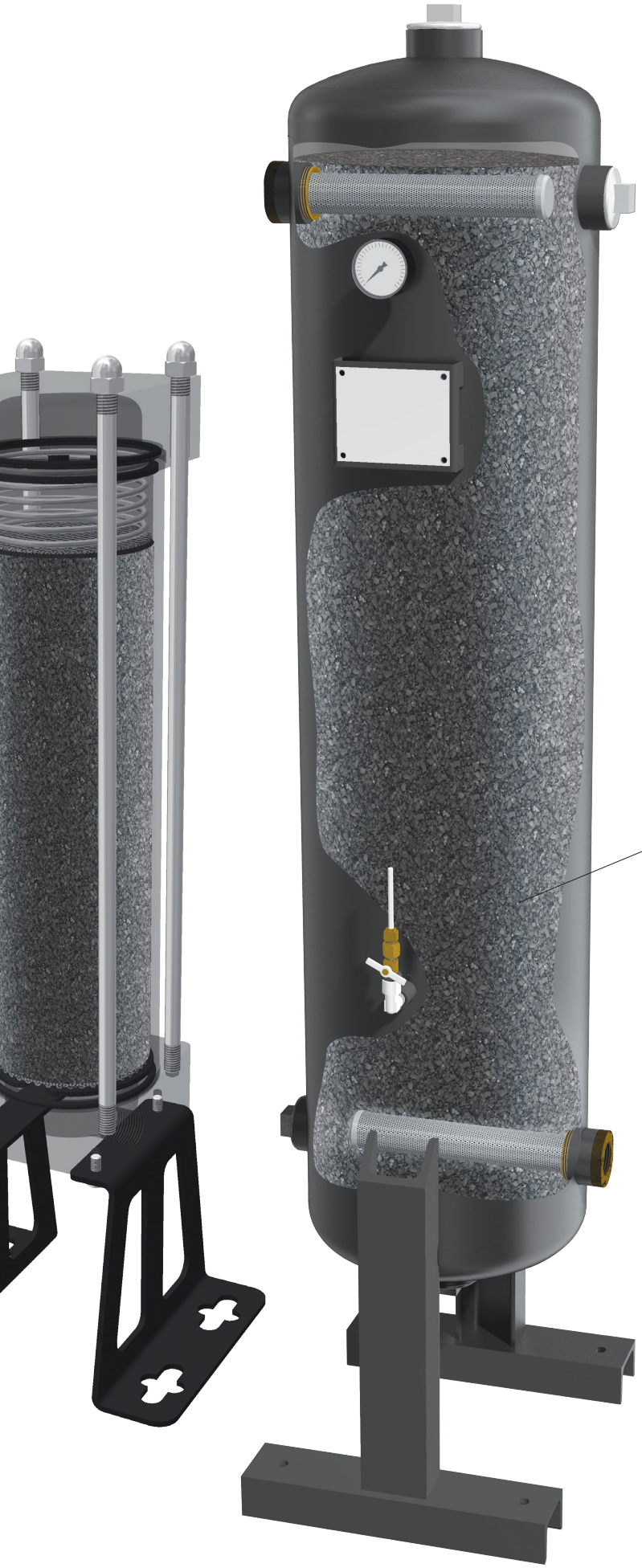
HIGH PRESSURE VERSIONS ARE AVAILABLE ON REQUEST.



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



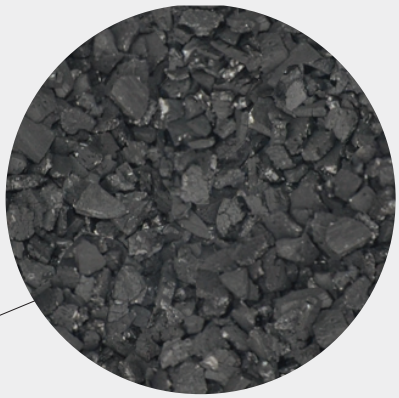
Functionality

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.

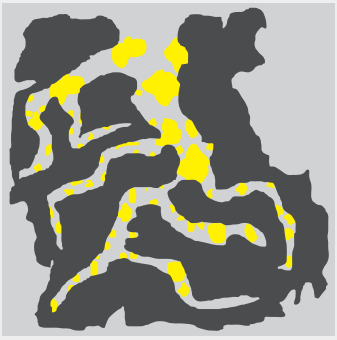
High pressure version is available on request.

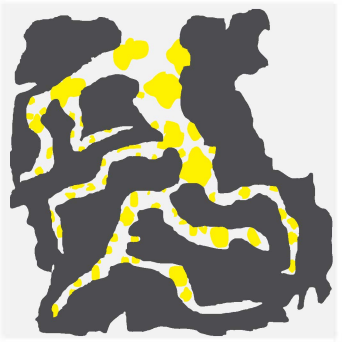


Activated carbon

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

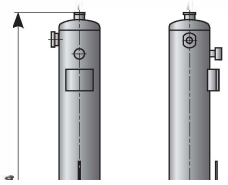
Due to its high degree of microporosity, just one gram of activated carbon has a surface area in excess of 500 m^2, as determined by gas adsorption. An activation level sufficient for useful application may be attained solely from high surface area.



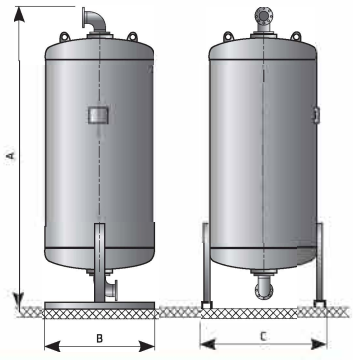


TECHNICAL DATA

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	
ACTM06									
ACTM12	3/8"	16	12	7	638	188	100	5,3	2 x ø80
ACTM23	3/8"	16	24	14,1	1106	188	100	6,5	4 x ø80
ACTM35	3/8"	16	36	21,1	1574	188	100	12	6 x ø80
ACTM56	1/2"	16	60	35,3	1106	270	148	15	4 x ø129
ACTM70	1/2"	16	75	44,1	1340	270	148	18	5 x ø129
ACTM105	1/2"	16	105	61,8	1808	270	148	22	7 x ø129
ACTM110	1"	16	110	86	1522	350	252	45	-
ACTM150	1"	16	150	117	1766	350	252	52	-
ACTM200	1"	16	200	157	1532	400	303	71	-
ACTM250	1"	16	260	204	1784	400	303	83	-
ACTM300	1 1/2"	16	320	251	1551	450	357	97	-
ACTM400	1 1/2"	16	410	321	1798	450	357	114	-
ACTM600	1 1/2"	16	590	462	1893	650	424	160	-
ACTM800	2"	16	770	603	1877	650	468	201	-
ACTM1000	2"	16	1000	784	1961	650	506	242	-
ACTM1200 F	DN50	16	1200	936	2170	550	550	280	-
ACTM1500 F	DN65	16	1500	1170	2210	620	620	355	-
ACTM2000 F	DN65	16	2000	1560	2330	700	700	420	-
ACTM2500 F	DN80	16	2500	1950	2260	760	760	510	-
ACTM3000 F	DN80	16	3000	2340	2400	800	800	595	-
ACTM3750 F	DN100	16	3750	2925	2490	920	920	745	-
ACTM5000 F	DN100	16	5000	3900	2600	1050	1050	960	-
ACTM6500 F	DN125	16	6500	5070	2730	1150	1150	1300	-



TAC



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.