



Compressed air treatment

Activated Carbon Towers



Features and benefits

ACT activated carbon towers have been designed and developed for separating oil vapours from compressed air and remove hydrocarbon odors (dry type separation).

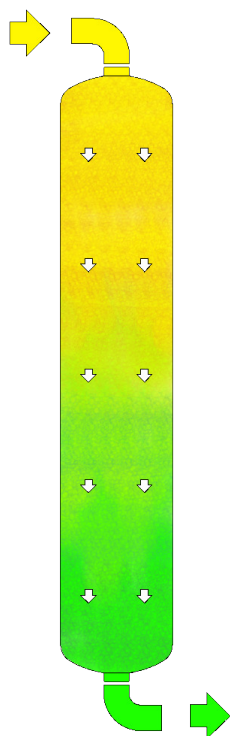
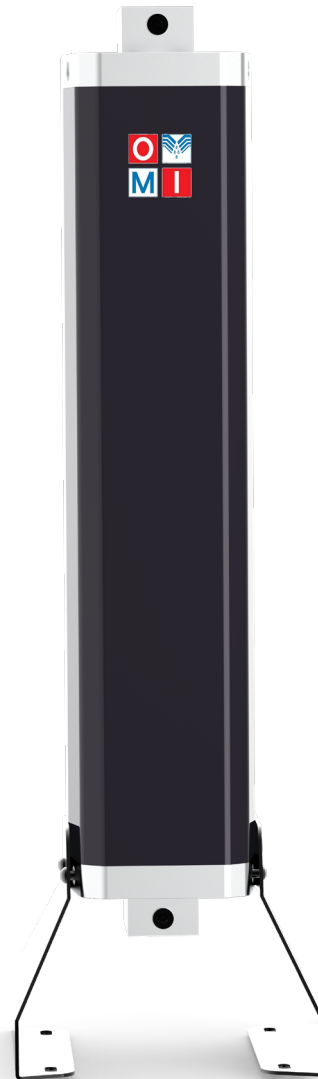
Consistent outlet air quality over 12 months of continuous operation before service is due. This technology, compared to the “cartridge solution” ensures a lower TCO and a lower environmental impact.

ACT models, ACT30÷ACT350 are made of extruded aluminum vessels, filled with activated carbon granulate. ACT 30 is supplied with wall mounting provision.

ACT models, ACT600÷ACT5700 are made of high quality carbon steel vessels, filled with activated carbon granulate.

Applications

- ✓ Automotive
- ✓ Manufacturing of semiconductors
- ✓ Food & beverage
- ✓ Petrochemical plants
- ✓ Nitrogen production
- ✓ Chemical plants
- ✓ Painting
- ✓ Pharmaceutical applications
- ✓ General industrial applications



How does it work?

Compressed air enters from the top of the column. It flows through the activated carbon bed evenly. During this process the oil vapors and other hydrocarbons are separated from the air, thanks to the adsorption process. The purified air comes out from the lower part of the column.

The installation of a coalescing pre-filter is recommended to extend the life of the carbon bed.

The installation of an antidust post-filter is recommended to prevent carbon dust and other particulate from going downstream and equipment.

Technical specifications

Model	Code	Flow-rate			ISO8573-1:2010 Classification
		l/min	m³/h	CFM	
ACT 30	04T.0030.G.0.0000	500	30	18	Class 0 - Total Oil (aerosol, liquid and vapor)
ACT 75	04T.0075.G.0.0000	1250	75	44	
ACT 110	04T.0110.G.0.0000	1833	110	65	
ACT 150	04T.0150.G.0.0000	2500	150	88	
ACT 180	04T.0180.G.0.0000	3000	180	106	
ACT 350	04T.0350.G.0.0000	5833	350	206	
ACT 600	04T.0600.G.0.0000	10000	600	353	
ACT 1000	04T.1000.G.0.0000	16667	1000	589	
ACT 1560	04T.1560.G.0.0000	26000	1560	918	
ACT 2300	04T.2300.G.0.0000	38333	2300	1354	
ACT 2800	04T.2800.G.0.0000	46667	2800	1648	
ACT 5700	04T.5700.G.0.0000	95000	5700	3355	

		ACT 30 + ACT 350	ACT 600 + ACT 2300	ACT 2800 + ACT 5700
MIN WORKING PRESSURE	barg	1	1	1
MAX WORKING PRESSURE	barg	14	15	13
MAXIMUM INLET TEMPERATURE	°C	+50	+50	+50
MINIMUM AMBIENT TEMPERATURE	°C	+2 °C	+2 °C	+2 °C
MAXIMUM AMBIENT TEMPERATURE	°C	+ 46 °C	+ 46 °C	+ 46 °C

Correction Factors

FC1 - Correction factor for working pressure												
Minimum inlet pressure												
bar	4	5	6	7	8	9	10	11	12	13	14	15
psi	58	73	87	102	116	131	145	160	174	188,5	203	217
FC1	0,63	0,75	0,88	1	1	1	1	1,14	1,14	1,14	1,25	1,25

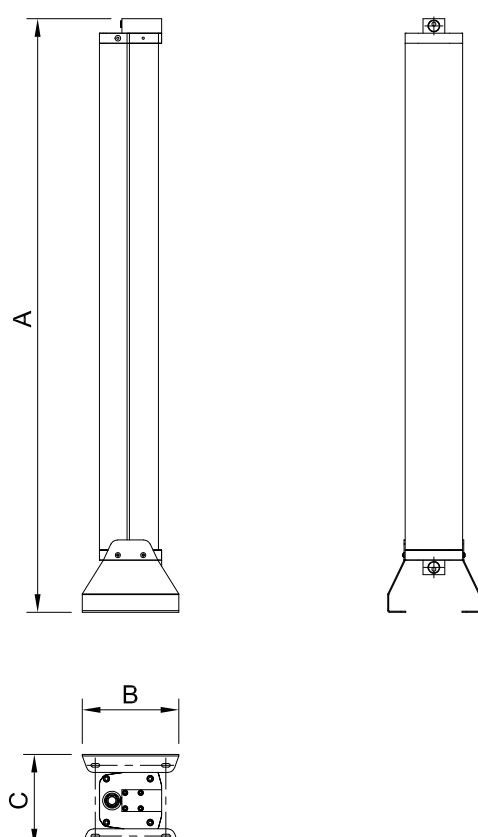
FC2 - Correction factor for inlet air temperature						
Maximum inlet temperature						
°C	25	30	35	40	45	50
°F	77	86	95	104	113	122
FC2	1	1	1	0,88	0,72	0,52

Calculation of the dryer REAL FLOW RATE = nominal dryer flow rate x [FC1] x [FC2] x [FC3]

Weights and Dimensions

Model	Connections	Dimensions						Weight	
		A		B		C			
	BSP	mm	in	mm	in	mm	in	kg	lbs
ACT 30	⅜"	749	29,5	212	8,3	143	5,6	8	17,6
ACT 75	¾"	890	35	267	10,5	255	10	20	44
ACT 110	¾"	1090	42,9	267	10,5	255	10	24	52,9
ACT 150	1"	1440	56,7	267	10,5	255	10	32	70,5
ACT 180	1"	1640	64,5	267	10,5	255	10	35	77,1
ACT 350	1" ½	1660	65,3	447	17,6	255	10	70	154,3
ACT 600	2"	2113	83,2	430	16,9	197	7,7	115	253,5
ACT 1000	2"	2148	84,5	482	18,9	197	7,7	157	346
ACT 1560	3"	2463	96,9	534	21	158	6,2	222	489,5
ACT 2300	3"	2693	106	649	25,5	158	6,2	379	835,5
ACT 2800	DN100 PN40	2879	113,3	772	30,4	145	5,7	456	1005,3
ACT 5700	DN150 PN40	3455	136	926	36,4	187	7,3	900	1984,1

Models from ACT 30 to ACT 350



Models from ACT 600 to ACT 5700

