

**AIR COMPRESSOR
TREATMENT
CARBON TOWER**

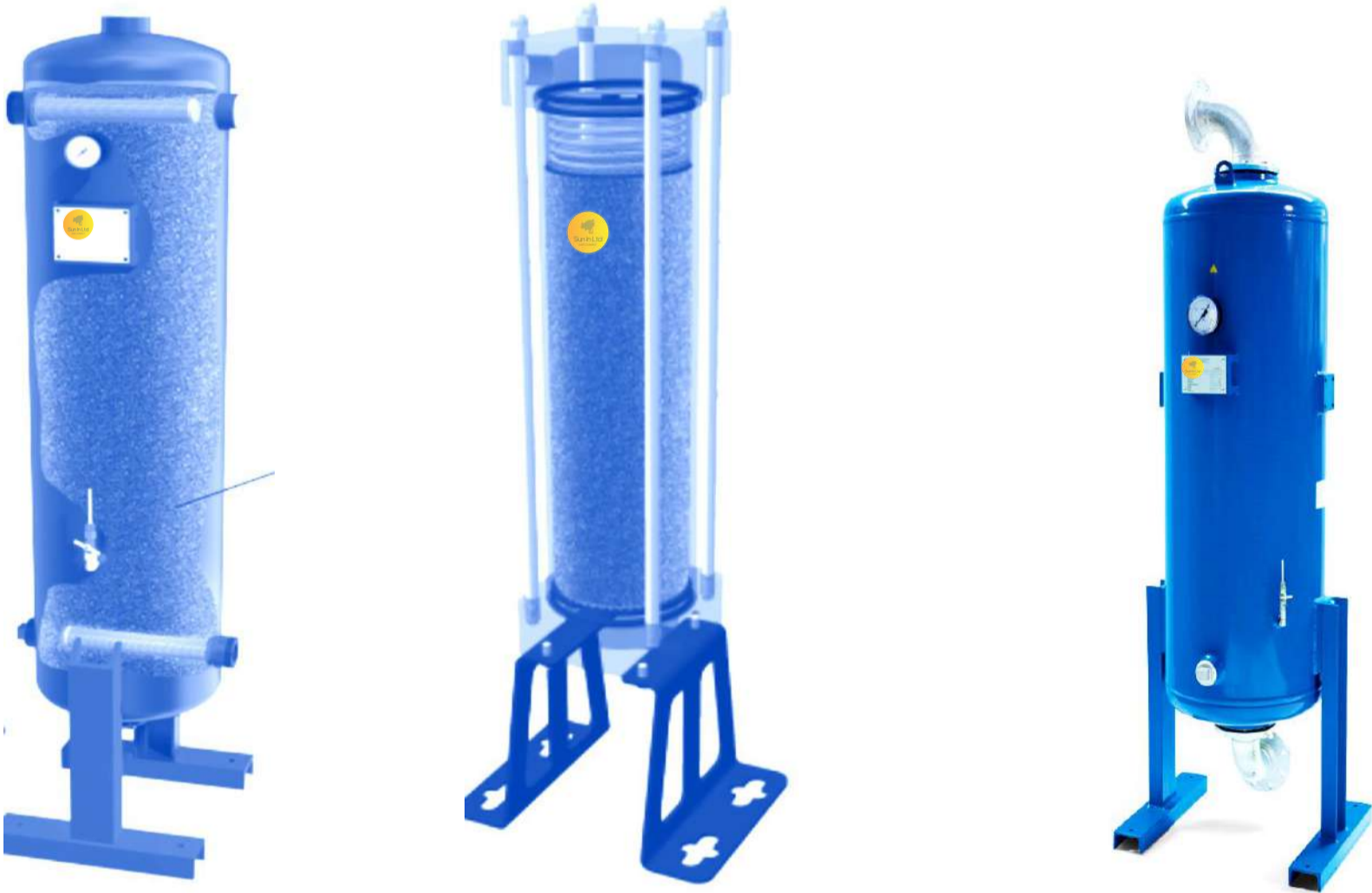
Products Catalog



SAVE THE ENERGY WITH BEST QUALITY PRODUCTS RANGE

High-end Activated Carbon Adsorber

ELITEAIR TECHNOLOGY - Activated carbon towers are intended for separating oil vapours from compressed air (dry type separation). ELITEAIR TECHNOLOGY 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 ELITE MODEL and 1 μm dust filter is recommended downstream to intercept activated carbon dust. High pressure version is available on request,



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 m², as determined by gas adsorption. An activation level sufficient for useful application may be attained solely from high surface area

High-End CARBON TOWER Compressed Air

Applications

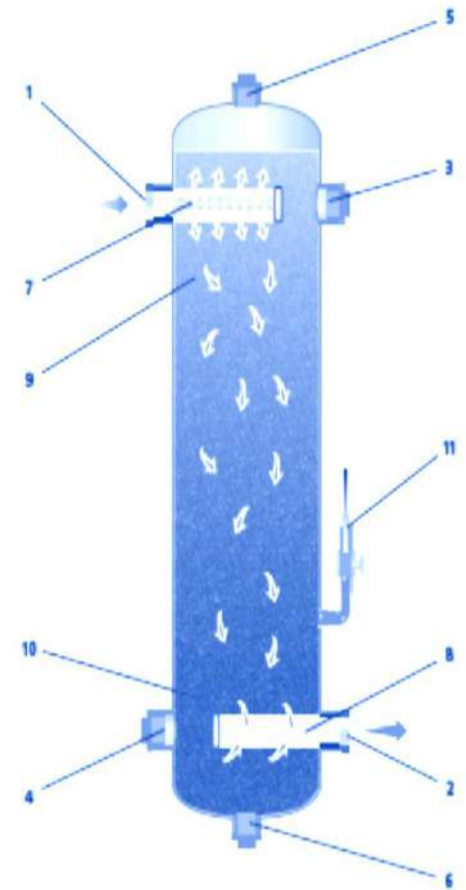
- ❖ Compressed air inlet (oily air)
- ❖ Compressed air outlet (clean air)
- ❖ Alternative compressed air inlet (oily air)
- ❖ Alternative compressed air outlet (clean air)
- ❖ Activated carbon filling aperture
- ❖ Activated carbon discharging aperture
- ❖ Inlet flow distributor
- ❖ Outlet flow distributor
- ❖ Saturated activated carbon granulate
- ❖ Non-saturated activated carbon granulate
- ❖ OCI - oil content indicator

Design

- ❖ Carbon Tower are designed to meet the demand for:
- ❖ Efficient removal of oil-dust will be suck like sulfur dioxide and chemicals from piston or oil flooded rotary compressors,
- ❖ Long service life
- ❖ Strength to withstand strenuous operating conditions
- ❖ Protection from oil slugs or compressor Air/ Oil separator failure

Features

- ✓ Very Low pressure drop
- ✓ Large oil catching efficiency
- ✓ Easy field cleaning
- ✓ Positive sealing O-rings
- ✓ Temperature (continuous) 4°C (40°F) min. 80°C (176°F) max.
- ✓ Auto Float Drain is Standard
- ✓ Multiple drain Style Options Available
- ✓ Pressure Rating of 14 bar (200 psig)
- ✓ Removal of particles down to 0.01 micron including coalesced liquid water and oil providing a maximum remaining oil aerosol content of 0.01 ppm
- ✓ Increased surface area in a given volume allows low velocity separation of ultra-fine
- ✓ Elements are grounded to canister minimizing static electricity problems





High-End Carbon Tower Compressed Air

TECHNICAL DATA

TECHNICAL DATA									
MODEL	CONT SIZE	Operating pressure	Flow rate at 7 bar(g), 20 °C		Dimensions [mm]			Mass	Cartridge
NO	Ø	bar	Nm ³ /h	scfm	A	B	C	KG	number
ELITE6	3/8"	16	6	3,5	404	188	100	3,5	1 x ø80
ELITE12	3/8"	16	12	7	638	188	100	5,3	2 x ø80
ELITE23	3/8"	16	24	14,1	1.106	188	100	6,5	4 x ø80
ELITE35	3/8"	16	36	21,1	1.574	188	100	12	6 x ø80
ELITE56	1/2"	16	60	35,3	1.106	270	148	15	4 x ø129
7ELITE0	1/2"	16	75	44,1	1.340	270	148	18	5 x ø129
ELITE105	1/2"	16	105	61,8	1.808	270	148	22	7 x ø129
ELITE110	1"	16	110	86	1.522	350	252	45	-
ELITE150	1"	16	150	117	1.766	350	252	52	-
ELITE200	1"	16	200	157	1.532	400	303	71	-
ELITE250	1"	16	260	204	1.784	400	303	83	-
ELITE300	1 1/2"	16	320	251	1.551	450	357	97	-
ELITE400	1 1/2"	16	410	321	1.798	450	357	114	-
ELITE600	1 1/2"	16	590	462	1.893	650	424	160	-
ELITE800	2"	16	770	603	1.877	650	468	201	-
ELITE1000	2"	16	1.000	784	1.961	650	506	242	-
ELITE1200 F	DN50	16	1.200	936	2.170	550	550	280	-
ELITE1500 F	DN65	16	1.500	1.170	2.210	620	620	355	-
ELITE2000 F	DN65	16	2.000	1.560	2.330	700	700	420	-
ELITE2500 F	DN80	16	2.500	1.950	2.260	760	760	510	-
ELITE3000 F	DN80	16	3.000	2.340	2.400	800	800	595	-
ELITE3750 F	DN100	16	3.750	2925	2.490	920	920	745	-
ELITE5000 F	DN100	16	5.000	3.900	2.600	1.050	1.050	960	-
ELITE6500 F	DN125	16	6.500	5.070	2.730	1.150	1.150	1300	-

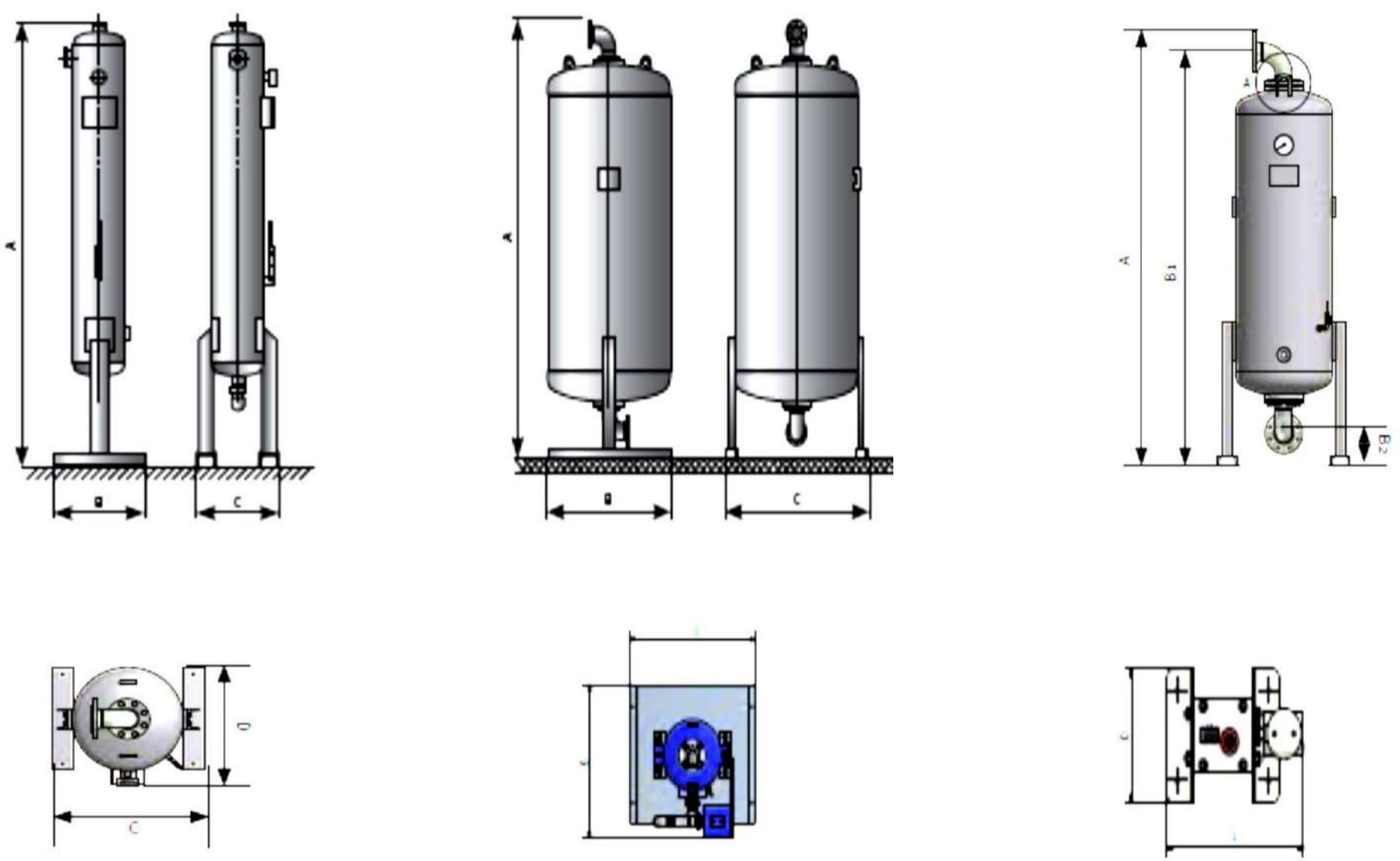
CORRECTION FACTORS															
Operating pressure [bar]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure [psi]	29	44	58	72	87	100	115	130	145	160	174	189	203	218	232
Correction factor	0,38	0,5	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,0	2,13
CORRECTION FACTORS															
Operating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

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/m ³]	

High-End Carbon Tower Compressed Air

Dimensional drawings



Field Of Application

Installation inside in non-aggressive atmosphere	
Residual oil amount at 20°C	0,003 mg/m ³
Relative humidity	100% (under the precondition of an upstream refrigeration dryer)
Ambient temperature max	50°C
Ambient temperature min.	+2°C
Operating pressure	0 to 16 bar g (10: max. 13,5 bar g)
Medium	compressed air and gases

* related to 1 bar (abs.) 20°C at 7 bar operating pressure

Approvals for Pressure Equipment
 EU Approved for fluid group 2
 according to Pressure Equipment
 Directive 2014/68/EU,
 module B+D (categories IV)
 other ASME
 according to classification 1 to 3 par. 3 art. 4
 DGRL 2014/68/EU, 4 to 10 categories |
 fluid group 2

Quality Management
 development/Production DIN EN ISO 9001

Air purity class according to ISO 8573-1:2010
 solid particles Class 2
 humidity (gaseous) -
 Total oil Class 1

According to Council directives 2014/29/EU on simple pressure vessels and directive 2014/68/EU on pressure equipment