





Problems Brought by Polluted Compressed Air

Air is compressible; the air compressor does mechanical work to make itself smaller in size, air pressure increase after called compressed air.

Compressed air is an important driving force that is widely used in various industrial fields. All compressed air systems air comes from the atmosphere and the air contains a lot of dust, water vapor and unburned hydrocarbons and bacteria. In addition, the air compressor lubrication system will produce such contaminants. This oil is acidic, inferior and which doesn't have any lubrication, Pipeline corrosion from compressed air distribution system also pollutes the air.

When air is compressed, the contained vapor (including oil vapor and water vapor) and dust concentration will raise sharply, oil, steam concentrate into large globules, mixed with a high concentration of dust particles, forming an abrasive acidic sludge.

Typically there are different contamination from the below sources, such as atmospheric dirt, water vapor, oil vapor, micro-organism.



Solid particles



Pipe scale



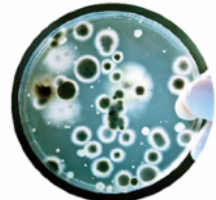
Liquid water



Liquid oil



Oil vapor



Micro-organisms

If there is no air treatment equipment installed, the above mentioned acidic abrasive sludge will enter your compressed air system, pipeline corrosion, damage pneumatic components and equipment, and to influence the final product quality.

Your Benefits from Our Air Filter Elements

The compression process introduces lubricant and wear particles into the system, piping distribution and storage tanks foster contaminants in the form of rust, pipe scale and bacteria. PF, AO, AA,AX,ACS, AR and AAR filters efficiently remove these contaminants to provide the best air purity and protect downstream equipment and your processes, saving costs.

PF

Coarse Pre-Filtration

As a primary filter, particles whose diameter down to 5 μm can be removed, the max. residual oil content is negligible.

AO

High Efficiency General Purpose

High efficiency general protection, dust particles, water mist & oil mist whose diameter down to 1 μm can be removed, the residual content of oil mist does not exceed 0.6 mg/m^3 (21°C), 1ppm(w), changed every 8000 hours.

AA

High Efficiency Oil Removal Filtration

Dust particles, water mist and oil mist down to 0.01 μm can be removed, the residual content of oil mist does not exceed 0.01 mg/m^3 (21°C), 0.01ppm(w), changed every 8000 hours.

AX

Ultra High Efficiency Filtration

Ultra-efficient filtration, solid particles, liquids, oil aerosols, odors, and vapors are effectively removed at a high efficiency of 99.99% as small as 0.01 micron, the residual content of oil mist does not exceed 0.001 mg/m^3 (21°C), 0.001ppm(w), changed every 8000 hours.

ACS

Oil Vapour Reduction

Activated carbon filter element made from thousands of activated carbon granules of sufficient thickness, giving a superior adsorption capacity on a longer time. Oil vapor & odor can be removed, the max. resident content of oil vapor does not exceed 0.003 mg/m^3 (21°C), 0.003 ppm(w), changed when oil vapor detected.

AR

General Purpose Dust Filtration

Dry particle removal down to 1 μm , installed after adsorption air dryer, change every 6000 hours.

AAR

High Efficiency Dust Filtration

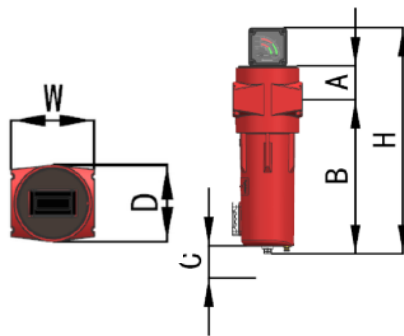
Dry particles removal down to 0.01 μm can be removed, installed after adsorption air dryer, change every 6000 hours.



Product Selection

Below flow rates of compressed air are calculated in rated working pressure of 7 bar (100 psi g) with reference to 20 °C.

Model	Inlet/ Outlet (Rc)	Rated Air Flow at 7 bar			Dimensions (mm)					
		L/S	Nm3/ min	Scfm	Width (W)	Depth (D)	Height (H)	A	B	C (Left space)
YD017	1/2"	16.7	1.0	35.3	89	79	252	40	192	118
YD025	3/4"	25.0	1.5	53.0	89	79	252	40	192	118
YD030	1/2"	30.0	1.8	63.6	89	79	285	40	226	158
YD035	3/4"	33.3	2.0	70.6	89	79	285	40	226	158
YD058	3/4"	46.7	2.8	98.9	120	110	406	55	281	195
YD068	1"	60.0	3.6	127.1	120	110	406	55	281	195
YD080	1"	80.0	4.8	169.5	120	110	508	55	383	290
YD145	1-1/2"	120.0	7.2	254.2	120	110	508	55	383	290
YD220	2"	200.0	12.0	423.7	162	151	737	64	566	480
YD260	2-1/2"	233.3	14.0	494.4	162	151	737	64	566	480
YD330	2"	267.2	16.0	564.8	162	151	984	64	875	780
YD360	2-1/2"	317.3	19.0	670.7	162	151	984	64	875	780
YD405	2-1/2"	367.4	22.0	776.6	200	189	757	78	634	560
YD430	3"	467.6	28.0	988.4	200	189	757	78	634	560
YD620	3"	620.0	37.2	1313.6	200	189	1012	78	889	780



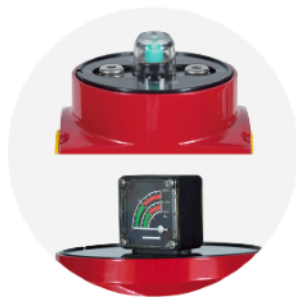
Pressure	Barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Psig	15	29	44	59	73	87	100	116	131	145	160	174	189	203	219	232
Pressure Correction Factor		0.38	0.53	0.65	0.76	0.85	0.93	1.00	1.07	1.13	1.19	1.23	1.31	1.36	1.41	1.46	1.51

To correctly select an air filter model, the flow rate of the air filter must be adjusted for the minimum operating (inlet) pressure at the point of installation.

Calculate the adjust filtration capacity:

1. Minimum Filtration Capacity = Compressed Air Flow Rate x pressure correction factor rate.
2. Using the minimum filtration capacity, select an air filter model from the flow rate tables above (air filter selected must have a flow rate equal to or greater than the minimum filtration capacity).

Accessories Suited with Air Filters



Differential pressure
indicator/gauge



Liquid sight glass



Float internal drain



Float external drain

Model	Standard accessories suited on filter housing					
	Differential pressure indicator	Differential pressure gauge	Sight glass	Internal float drain	External float drain	Manual drain valve
YD017	√		√	√		
YD025	√		√	√		
YD030	√		√	√		
YD035	√		√	√		
YD058		√	√	√		√
YD068		√	√	√		√
YD080		√	√	√		√
YD145		√	√	√		√
YD220		√	√		√	√
YD260		√	√		√	√
YD330		√	√		√	√
YD360		√	√		√	√
YD405		√	√		√	√
YD430		√	√		√	√
YD620		√	√		√	√

Filtration & Separation Solution for Industries

Applications for compressed air are numerous and have requirements from very simple to highly strict, Our high efficiency air filters designed for removing contaminants to protect downstream of equipment.

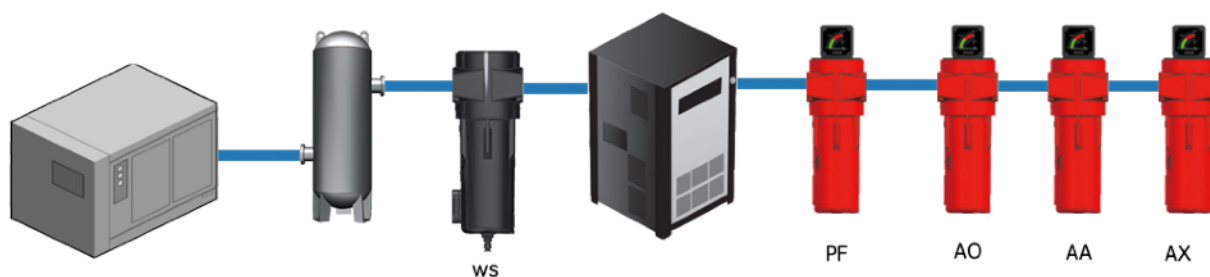
Air dryer: Installed after an air compressor, it removes moisture from compressed air using a refrigeration system or adsorption system, protecting pipelines and equipment from condensate.

Water separator: Installed in front of refrigerated air dryers and coalescing air filters to remove bulk liquids and wet solids, improving the whole compressed air system performance.

Air filter : Various types of air filters are available, including particulate and coalescing air filters, activated carbon filters, and dust filters installed after water separators to remove solid particles and oil vapor down to acceptable levels to protect downstream equipment and finished products.

Auto drain: Reliably and consistently discharge water for a wide range of compressed air applications including compressors, after coolers, air filters.

Tire filling	Injection molding	Powder fluidization	Air jet
PET bottle blowing	Semiconductor	Air filter after air dryer	Air bearing
Dry bulk solids conveying	Package	Filled/capped beverages	Aerial winch
Dust collection	Deodorant	Aerospace industry	Grain color sorting
Cool down	Processing air	Breathe the air	Parts blasting
Tablet coating	Blow dust	Chemical Industry	Spray paint
Dairy Air	Bag cleaning	Military equipment	Sandblasting
Liquid filling	Nitrogen separation	Pre-air filter	Bottled gas
Instrument gas	Laser-cutting	Air metering	Pneumatic tools
Pneumatic automation	Ferment	Air agitator	Air motor
Pneumatic conveying	Sprinkler system discharge	Ventilation	Dental hand tools





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OEM Capabilities

When you need a special filter for a unique application, Yun Air experts are ready to work with you. We can tailor a configuration to meet your special need from the wide variety of filter media available. In addition, with LEAN manufacturing, we can produce specials in reasonable quantities, in a reasonable amount of time, at a reasonable price. Not only will this enhance the performance of your product, but it will benefit you with aftermarket sales of replacement elements.

OUR RANGES OF PRODUCTS INCLUDE THE FOLLOWING:

- Compressed air dryers
- Compressed air filters
- Compressed air water separators
- Alternative air filter elements
- Condensate auto drain
- Compressed air accessories
- Portable mask