

RF Series Filter Media Selection Chart

Use the ISO Standard 8573-1 “Compressed Air for General Use” as a guide when selecting the correct compressed air purification equipment to suit an application. This ISO classification method presents in tabular form the 3 types of contaminant found in compressed air –

Solid Particle
 Water Vapour
 Oil Content

The classification is written as Class 123. Where 1 represents the solid particle component, 2 represents the water vapour load and 3 represents the maximum oil carry over.

As an example: a system with ISO 8573-1 air quality of 1 4 1 would have a maximum particle concentration of 0.08 ppm, a pressure dew point of +3°C and a maximum remaining oil content of 0.01 mg/m³.

ISO Standard 8573-1

Class	Max size * µm	Solid Particle Max Concentration **		Water Vapour Max Pressure Dew point °C	Oil Carryover Max Concentration **	
		Ppm	Mg/m ³		Ppm	Mg/m ³
1	0.1	0.08	0.1	-70	0.008	0.01
2	1	0.8	1	-40	0.08	0.1
3	5	4.2	5	-20	0.83	1
4	15	6	7	+3	4.2	5
5	40	8.3	10	+7	21	25
6	-	-	-	+10	-	-

Rawsen Coalescing Filter Media

Media Grades	Particle Efficiency		Water Vapour Max Pressure Dew point °C	Oil carryover Max Concentration ²	
	Mean Pore Size ¹ µm	Coalescing Efficiency 0.3 to 0.6 µm		ppm	Mg/m ³
10C	0.7	95.0%	An air dryer is required to attain an ISO rating in this category	0.83	1
8C	0.4	98.5%		0.2	0.24
6C	0.3	99.97%		0.008	0.0096
4C	0.2	99.995%		0.003	0.0036

Grades 6C and 4C are rated as 0.01 µm filters.

Rawsen Activated Carbon Filter Media

Media Grade	Vapour Removal Efficiency
AU	99+%

All activated carbon filters must be preceded by a Grade 6C coalescer.

Rawsen Particulate Filter Media

Media Grade	Absolute Efficiency Rating
PU	3 micron

NOTES:

* Particle size is based on a filtration ratio of $B(x) = 20$.

** Measured at 100 kPa absolute, +20°C, and a relative humidity of 60%.

¹ Mean pore size refers to average physical pore size of filter media. Filtration of particles of 0.1 µm and smaller does not occur through direct impaction, but rather by the action of electrostatic and Van Der Waals forces.

² Tested as per BCAS860900 at inlet load of 40 ppm.

Filter elements are manufactured from FDA approved materials.