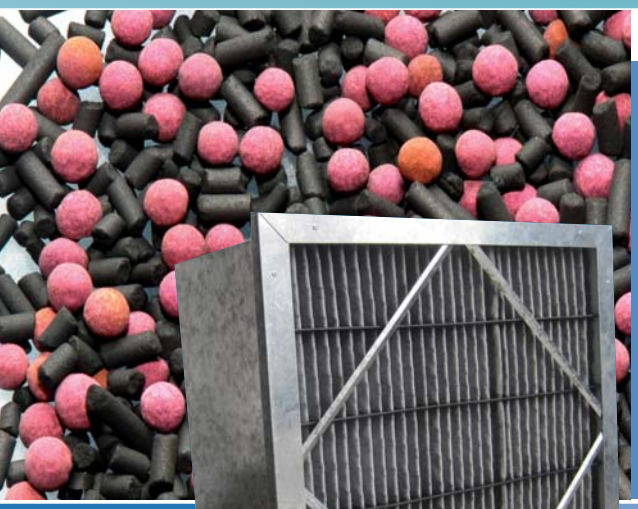
Chemical Carbon HD Filters

Carbon HD Interfirm & Carbon PL Vcell filters >90% to 99.9%

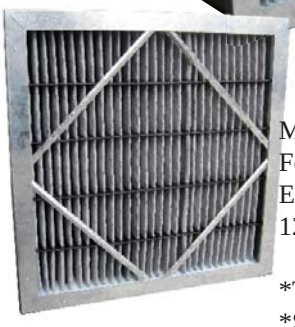
General Organic Vapours, Odours, Acid Gases, Sulphur Compounds



General Characteristics

Chemical Carbon is a tried and tested gas adsorbent used in airborne moelecular contaminants control (AMC) in various critical applications like semi-conductor cleanrooms. Our specially manufactured chemcial carbon media filters able to remove up to 99.9% of concentration of gases (Toulene, H_2S, SO_2). Chemically impregnated carbons to better control both acid and bases gases such as NO_x, HCI, HF, Methyl Mercaptan, active sulphur composites, ammonia, formaldehyde and highly volatile radioactive organic iodides in Air and CO_2.

Construction



Model: CARB HD IFR
For Supply AHU or PAU
Expected Breakthrough lifespan 12mths

*Toulene >98% 60days
*Sulphur Dioxide >90% 60days

Chemical Filters
Model: CARB PL VCELL
For Supply AHU or PAU
Expected Breakthrough lifespan 6mths

*Toulene >99% 30days
*Sulphur Dioxide >95% 30days

*Based on 10ppb challenge airflow volume 3400cmh. Results will greatly varies on onsite conditions and humidity. Higher Concentration challenge will decrease filter lifespan

Carbon HD Interfirm

Carbon HD IFR SH is deep pleated V using specially manufactured carbon sandwiched with prefilter media.This standard 12" deep filter with Standard 22mm single header fits all standard filter holding frames and side access 1" filter housing. They are used in Critical Supply Fresh Air Intake, AHUs of Cleanrooms in controlling Airborne Molecular Contaminants (AMC) and fragrances research or manufacturing. Highly Effective from 90-95% removal of fumes, vapours and chemical adsorption of gases in critical applications. The plastic frame is corrosion resistant and ensures lighter weight filter construction. Carbon Pleated Vcell is made of minipleat carbon media with plastic separators.

Enclosing Frame: Galvanised Steel, Optional Powder Coated

Carbon Pleated Vcell

Specially manufactured carbon is sandwiched with prefilter media comes in minipleated arranged in V configuration to filter media area. This standard 12" deep Carbon PL Vcell filter with Standard 22mm single header fits all standard filter holding frames and side access 1" filter housing. They are used in Critical Supply Fresh Air Intake, AHUs in controlling AMC and fragrances research or manufacturing. Highly Effective from 90-98% removal of fumes, vapours and chemical adsorption of gases in critical applications. The plastic frame is corrosion resistant and ensures lighter weight filter construction. Carbon Pleated Vcell is made of minipleat carbon media with plastic separators.

Enclosing Frame: Plastic

Carbon Minipleat Chemical

Specially manufactured carbonsandwiched with prefilter media comes in deep minipleated 4" deep Box filter which can be employed at Fan Filter Unit or Equipment. They are used in Carbon Final Filter in AMC control. Highly Effective from 98-99.9% removal of fumes, vapours and chemical adsorption of gases in critical applications. The plastic frame is corrosion resistant and ensures lighter weight filter construction. Carbon Pleated Vcell is made of minipleat carbon media with plastic separators.

Enclosing Frame: Aluminium

Applications

Air Handling Units of semiconductor clean rooms in gases, odour or chemical adsorption control, AMC Control. Fan Filter Units.

IF International Filtration

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Specifications

Model	Carb HD IFR SH or NH	Carb PL Vcell	Carb MP
Description	**Carbon HD Interfirm**	**Carbon Pleated Vcell**	**Carbon Minipleat**
Nominal Thickness, Actual in mm	**12”**	**12”**	**4”**
Rated Airflow cmh	3400	3400	580
Initial Pressure Drop Pa	125	70	45
Recommended Final Pressure Drop Pa	250		100
Filter Media Area m^2	10.0	8.0	7.5
Efficiency of Toulene Challenge %	90-95	92-98	98-99.9
Expected Breakthrough Toluene at 10ppb challenge days	270	180	180 days

Application

For general odours and organic fumes.
For acid fumes and organic solvents, HCl, Chlorine Dioxide, SO_2, H_2S
For bases fumes, ammonia gases
For general hydrocarbons, acid gases, sulphur compounds, Mercaptans, SO_2, NO_2

Dimensions

Nominal Size L x H inches	Actual Size L x H mm	Pleated Vcell 12” Depth			4” Depth			2” Depth		
		Rated Air Flow cmh	Media Area m^2	Weight kg	Rated Air Flow cmh	Media Area m^2	Weight kg	Rated Air Flow cmh	Media Area m^2	Weight kg
12 x 24	289 x 595	1700	3.1	4.0	1700	0.9	1.5	1020	1.3	0.8
16 x 24	395 x 595	2260	NA	NA	2260	1.1	2.0	1360	1.8	1.0
20 x 20	495 x 495	2380	NA	NA	2380	1.2	2.0	1420	1.8	1.0
20 x 24	495 x 595	2830	6.3	7.0	2830	1.4	2.4	1700	2.2	1.2
20 x 25	495 x 622	2970	NA	NA	2970	1.5	2.4	1780	2.3	1.2
24 x 24	595 x 595	3400	8.0	18.0	3400	1.9	3.0	2040	2.5	1.5

Odd sizes can be custom fabricated accordingly. Width and height dimensions are interchangeable.

Technical Data

Filter Media
Polyester media with activated carbon

Enclosing Frame
Galvanised Steel (Gi), Plastic, Aluminium (Al)

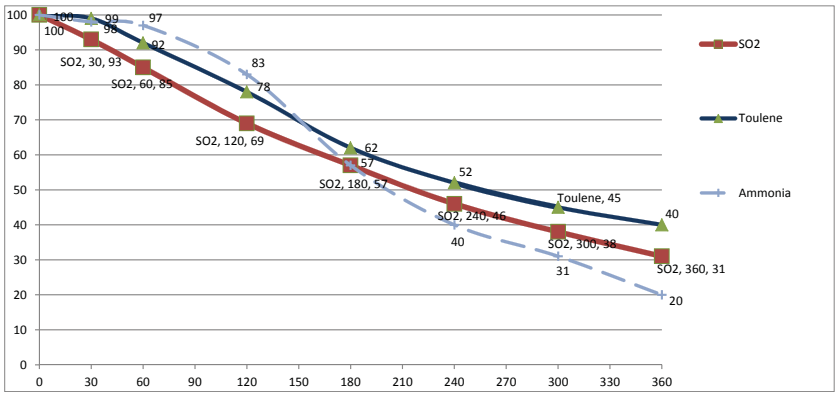
Header Option
22mm Header, Box

Separator
Paperboard/ Plastic or Metal Fingers
Hotmelt Beads

Sealant
Water based Glue or Hotmelt

Continuous Operating Temperature	50°C
Relative Humidity	80%
Recommended Final Pressure Drop	250 Pa
Maximum Final Pressure Drop	375 Pa

Challenge of 10ppb
Efficiency vs Time (days)



International Filtration

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