



CFMAIRSYSTEMS

A U S T R A L A S I A



Kitchen Exhaust Fume Solutions

CFM ELECTROSTATIC AIR CLEANER



AN EFFICIENT AIR SOLUTION:

CFM Electrostatic Precipitator is a device which can remove airborne particles with high-efficiency and low pressure drop. It can filter particles of sizes from 0.01 microns to 100 microns, thus widely used filter particulates like dust, oil mist and cooking fumes. Typical application is to purify cooking fume from commercial kitchens of restaurants, delis, company canteen, hospitals, schools, and sport & entertainment complexes. It is also used for coffee roasting, CNC machine shops and Cold Heading, cleaning room, smoking room and other HVAC air purification.

CFM Electrostatic Precipitator provides the highest level of efficiency available today. With no moving parts, the unit requires very little active maintenance. Each module features a clear illuminated display that indicates when a service is required. The filter cells can be removed and replaced, and the internal surfaces of the ESP can be thoroughly cleaned and degreased.

The units can easily be fitted to an existing exhaust system and due to its extremely quiet operation and space allowing can be fitted internally, however should space be a premium its light enough to be fitted on most roof tops or at the rear of the building.

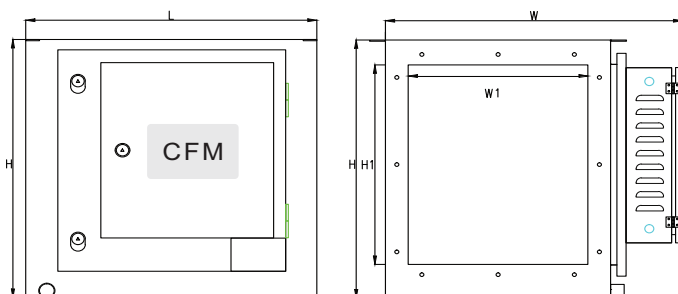
AN SUPER FUME SOLUTION:

- ✦ Over 95% fume elimination efficiency with a single pass.
- ✦ Highly efficient & stable power supply with multiple self-protection functions.
- ✦ Spiked ionizing blades, longer life span.
- ✦ 20160 sq. in. surface area in a single collector, more area to collect air pollutants.
- ✦ Auto power off when door is open.
- ✦ Release residual charge on filter cell automatically when door is open, higher safety for maintenance.
- ✦ Independent ionizer and collector for easier for maintenance.
- ✦ Al₂O₃ insulator for ionizer and military grade insulator for collector for super long life.
- ✦ Durable & efficient A5052 aluminum alloy filter cell ensures long term performance and reliability.
- ✦ LED light to show status.
- ✦ Modular design for greater flexibility.

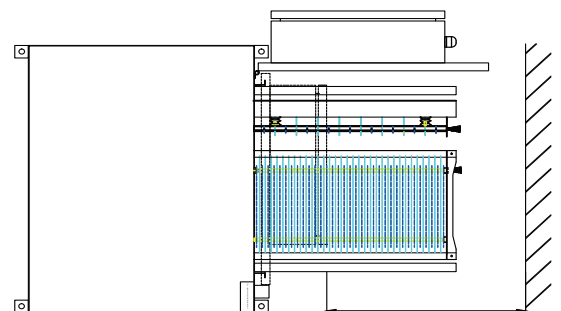
Product Specs

Model	LYAL-CK-VH25	LYAL-CK-VH50	LYAL-CK-VH75
Product Size L*W*H	640*650*610 mm	640*1100*610 mm	640*1555*610 mm
Air Inlet Size L1*W1	390*480 mm	850*480 mm	1300*480 mm
Weight	62 KG	91 KG	118 KG
Max Power Consumption	100 W	150 W	200 W
Power Supply	AC 240V, 50HZ		
Air Volume	2500 CMH / 1471 CFM	5000 CMH / 2943 CFM	7500 CMH / 4414 CFM
Efficiency	To 91-96% based on ASHRAE 52.2 for a single pass (Tested in USA Lab); 99% for Double Pass (Calculated)		
Static Pressure	≤100 Pa		
Cabinet Material	16 GA /1.5mm electro-galvanized steelsheet with eletrostatic epoxy coating		
Pre / After-filter	Aluminum mesh, washable		
Filter Cell Material	A5052 aluminum alloy		
Filter Cell Structure	Ionizer and collector are sepatred to reduce unit weight for easier maintance		
Filter Cell Specs (Per Cell)	Ionizer: 9 sets spiked ionising blades Collector: 13 sq meters surface area with33 hotplates & 32 ground plates Collection cell field with place spacing: 6mm		
Filter Cell QTY	1	2	3
Filter Cell Voltage	Ionizer: 13.5±0.5 KVdc Collector: 6.5±0.5 KVdc		
Safety Switch	Auto power off when door is open; Auto discharge filter cell electrical residual when door is open		
Safety Statement	CE		
Quality Endorsement	ISO 9001		

Product Size

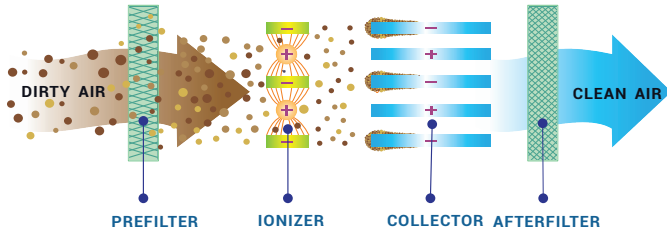


Installation Space



Installation space >500mm

Working Principle



When dirty air (fume or smoke) enters the electrostatic precipitator, the pollutant particles pass through a high intensity electrical field (IONIZER) which imparts an electrical charge to the particles, which range in size from 0.01 micron to 10 microns. The charged particles pass through a series of parallelized charged collector plates. Particles are repelled by plates with the same polarity, but attracted and collected by plates with opposite polarity. The pollutants particles collected are held in these plates and liquid pollutants (like oil in cooking fume) can drain down to collection tray in the bottom. Then you get clean air.

RANGE OF POLLUTANTS		0.01	0.10	1	10	100
PARTICLE SIZE IN MICRONS						
AIRBORNE PARTICLES	Coal Dust					
	Cement Dust					
	Paint Particles					
	Atmospheric Dust					
	Dust & Fumes					
	Polluents					
	Tobacco Smoke					
	Oil Smoke					
	Cooking Smoke					
	Contact Sulfuric Mist					
	Zinc Oxide Fumes					
	Pneumatic Nozzle Drops					
PARTICLES AIR FILTERS CAN FILTER	CFM Electrostatic Air Cleaner					
	High Efficiency Filters					
	Mechanical Separators					
	Common Air Filters					

Typical Application

Cooking Fume

Restaurants, Delis, Company canteen, Kitchens of Hospitals & Schools, and Sport & Entertainment Complexes.

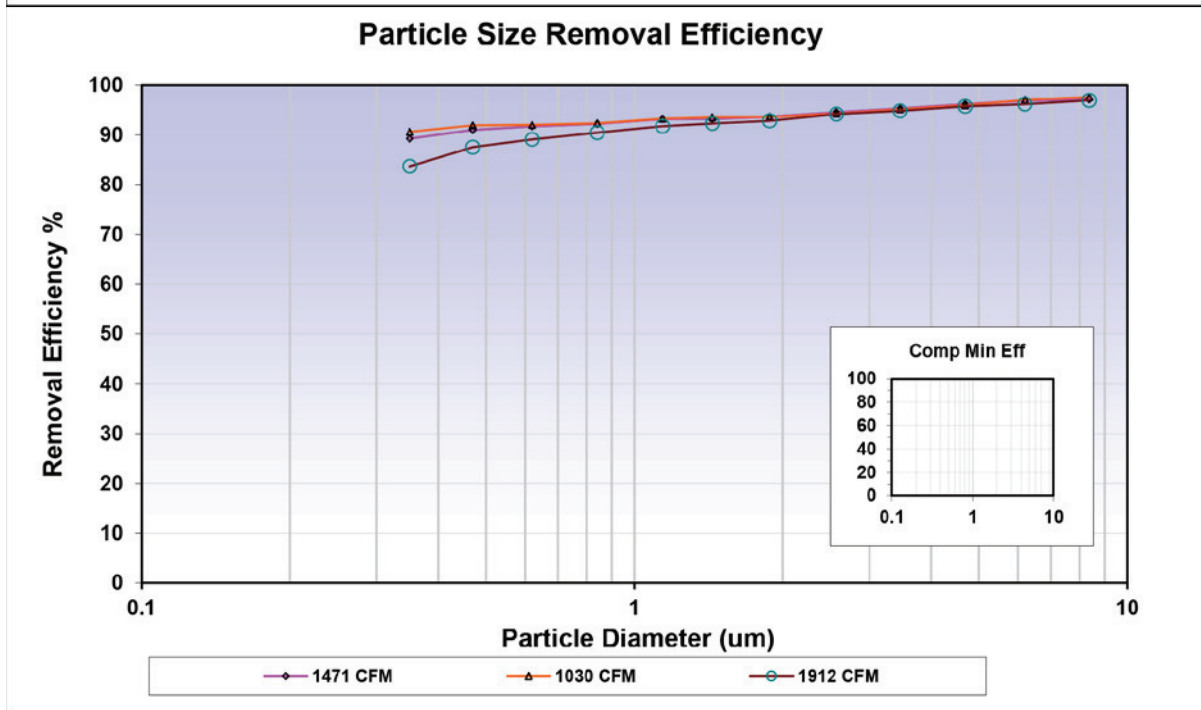
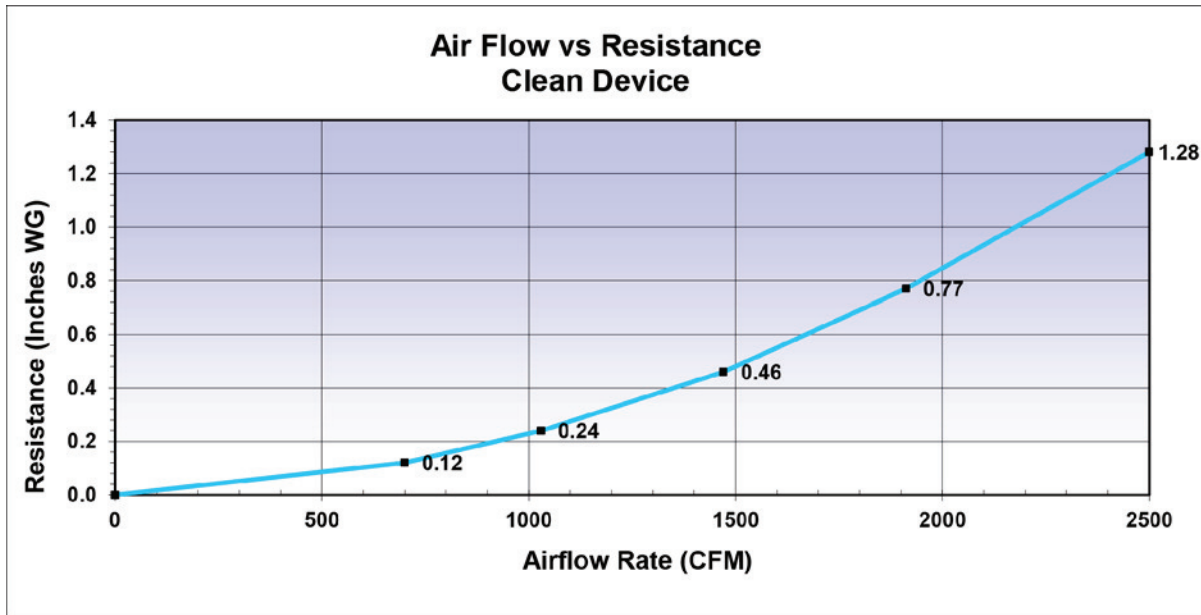
HVAC Air

Clean Rooms, Return Air, Bars, Smoking Rooms, Casinos, Parking Lot

Industrial Exhaust Air

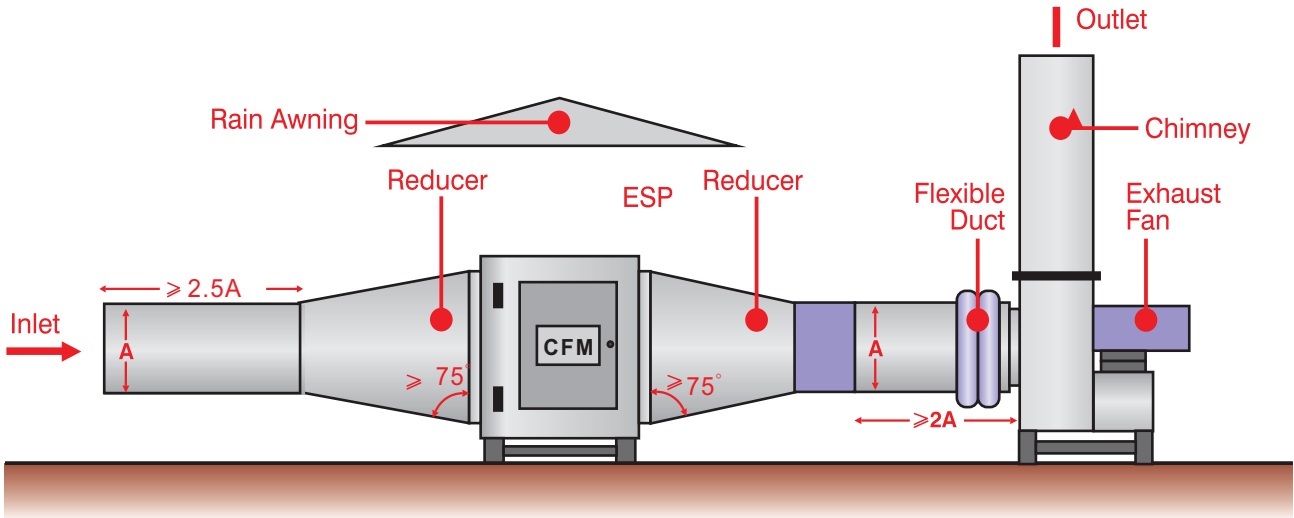
CNC Machine Shops, Cold Heading, Plasticisers etc

A TESTED & PROVEN TECHNOLOGY



Note: Above test is done by Blue Heaven Technologies in USA on ASHRAE 52.2.

Ideal Installation Configuration



Installation Way

