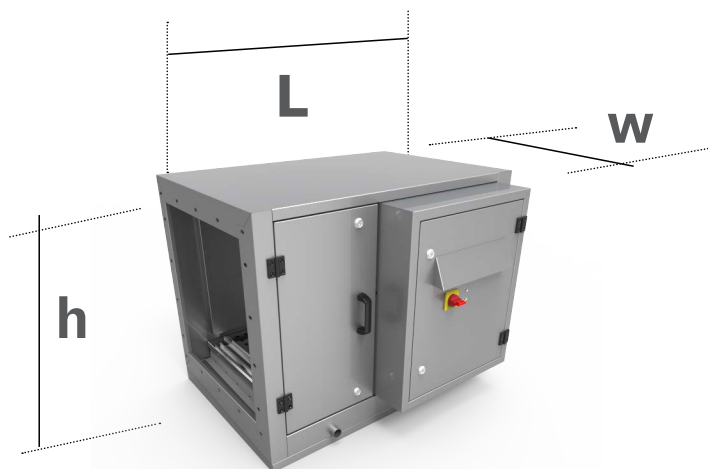


Introducing the new Chapman Ventilation range of high performance

Electrostatic Precipitators 24V

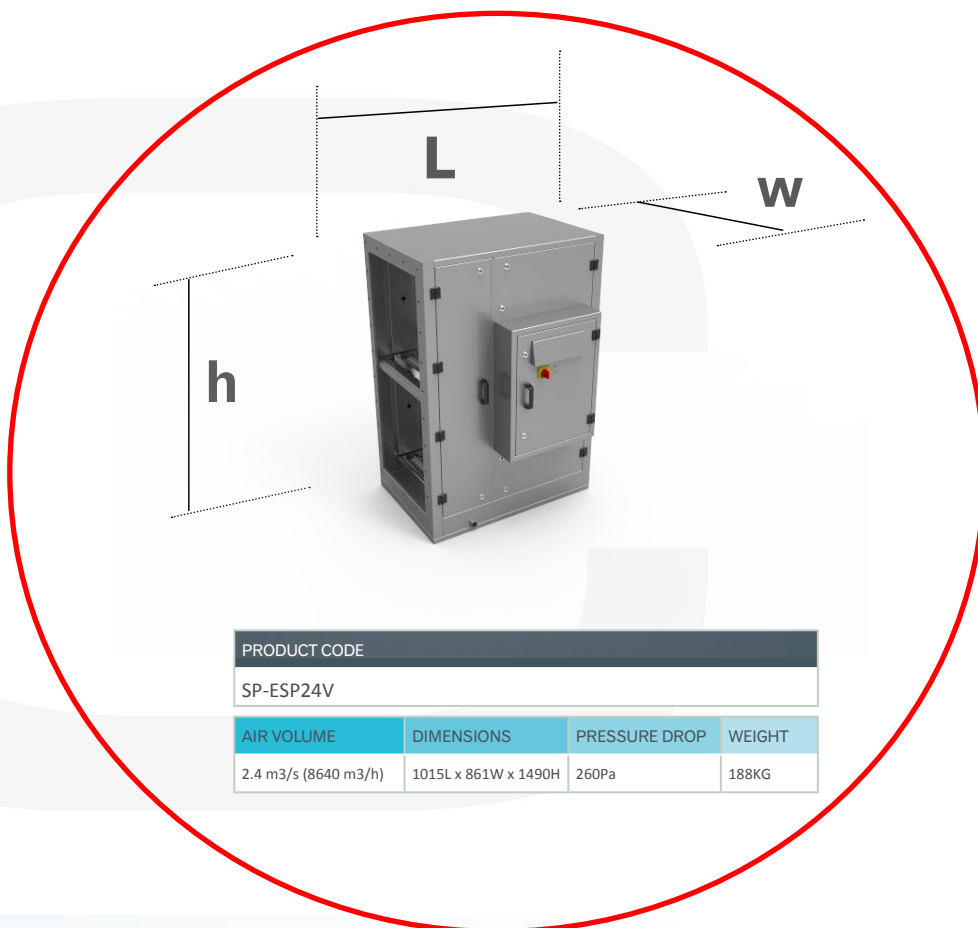




PRODUCT CODE			
SP-ESP 12			
AIR VOLUME	DIMENSIONS	PRESSURE DROP	WEIGHT
1.2 m ³ /s (4320 m ³ /h)	1015L x 847W x 800H	330Pa	110.4kg



PRODUCT CODE			
SP-ESP 24S			
AIR VOLUME	DIMENSIONS	PRESSURE DROP	WEIGHT
2.4 m ³ /s (8640 m ³ /h)	2030L x 847W x 800H	380Pa	220.8kg



PRODUCT CODE			
SP-ESP24V			
AIR VOLUME	DIMENSIONS	PRESSURE DROP	WEIGHT
2.4 m ³ /s (8640 m ³ /h)	1015L x 861W x 1490H	260Pa	188KG



PRODUCT CODE			
SP-ESP 48			
AIR VOLUME	DIMENSIONS	PRESSURE DROP	WEIGHT
4.8 m ³ /s (17,200 m ³ /h)	2030L x 847W x 1600H	460Pa	441.60kg



PRODUCT CODE			
SP-ESP 72			
AIR VOLUME	DIMENSIONS	PRESSURE DROP	WEIGHT
7.2 m ³ /s (25,908 m ³ /h)	3045L x 847W x 1600H	540Pa	662.40kg

The above dimensions are just a guide. Full dimension drawings are available on request.
Due to constant product development, specifications and design may be subject to change without notice.
Alternative air volume selections are available. Please contact us directly for more information.

innovative design to eliminate grease and smoke particles

Maximum efficiency, minimum space: CVL's Electrostatic Precipitator (ESP) is the most sustainable and efficient way of removing grease and smoke from kitchen emissions.

why electrostatic precipitation?

It's simple. Because an ESP provides the highest level of efficiency available today. Up to 95% in fact. Gone are the days of costly, space consuming and non-recyclable filters that send tonnes of waste to landfill every year. Instead, electrostatic precipitation offers a truly sustainable and low maintenance option. It uses an electrostatic charge targeted specifically at grease and smoke particles to remove these contaminants from the air stream, causing them to form a film inside the ESP unit. Here at CVL, we use high-efficiency vapour blast cabinets to remove this film. Using only ten litres of water and 6 volts of electricity, this is a simple step towards environmental sustainability. Plus, as all cleaning takes place on site, you don't have to worry about it, it's cheaper and quicker. No fuss, no bother, no interruptions.

the modular design

CVL specialises in creating bespoke integrated solutions. That's why our robust ESP units can be configured to accommodate any air flow, and provides unrivalled filtration of grease and odours. A totally sustainable, total solution.

our technology

Electrostatic precipitation consists of three distinct stages. Firstly, grease and smoke particles in the air stream are positively charged by central cathode needles. This causes the charged particles to migrate towards the surrounding cylindrical anode collection tubes, where they settle and form a film. Our ESP system also generates ozone to effectively eliminate odours from kitchen emissions, the only ESP on the market today that can deal with odour too. Here at CVL, we are continuously improving our products to ensure that they are the most effective and efficient pieces of equipment on the market today.

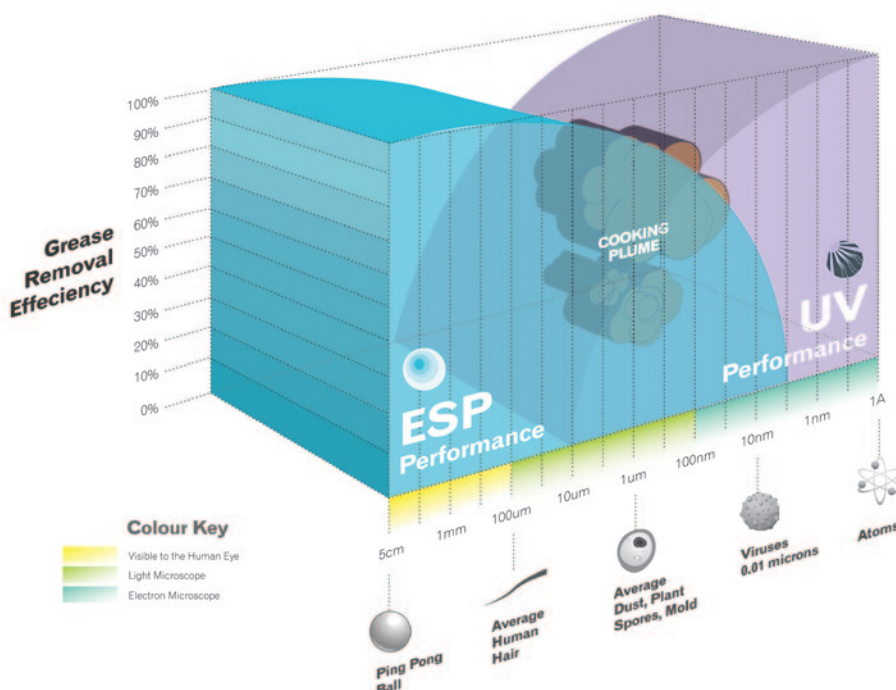
features

A CVL ESP features several technological advancements, all of which contribute to increased efficiency and environmental sustainability:

- The cathode needles are positioned centrally within the cylindrical anode collectors. This ensures a constant, robust and improved ionisation field.
- Typically, existing ESP technology only allows for an inlet velocity of 3-4m/s. CVL' ESP can handle four times that. Our units are able to handle velocities up to 15 m/s with no detrimental effect on performance.
- In contrast to other filtration units, CVL' ESP only applies energy to the contaminants, resulting in a very small drop in air pressure.
- Superior mechanical strength enables the unit to withstand cleaning and maintenance.
- A flow-equalization plate removes large particles and encourages even air-flow across the cells, thereby increasing efficiency.
- Working with a limited number of UK suppliers, we have now solved one of the one of the major problems that have been consistent across all ESPs until now: the need to swap out cells as part of a monthly cleaning cycle. We have developed a technique that allows us to clean cells on site there and then, without having remove and replace them.
- Our systems now generate ozone to eliminate odours from kitchen emissions.
- Ozone is a highly reactive molecule and a natural air cleanser. It is an integral part of ozonolysis, oxidising complex, odorous compounds or VOCs into smaller, harmless molecules.

maintenance

With no moving parts, an ESP requires very little active maintenance. However, we do recommend a regular cleaning routine in order to ensure that your ESP is performing at its optimum efficiency. Each module features a clear, illuminated display that indicates when a service is required. For the most part, servicing is simple. The filter cells are thoroughly cleaned and de-greased on site that day by one of our experienced engineers. Our technology means the cells do not have to be removed to be cleaned. This is a unique service. Not only does it reduce time and cost but it also increases service intervals and system efficiency.



Grease, smoke, moisture, gases and vapour: these particles constitute the cooking plume. Typically, they vary in size from 30 microns to sub microns, from combined grease and moisture to vaporised molecules. The graph opposite demonstrates the effectiveness of the CVL ESP system. Electrostatic precipitation is up to 95% effective at eliminating the particles within the blue shaded area, which includes odours, grease and smoke.

