

Technical Data Sheet



AirQon Synergies

Electrostatic Precipitator

Electrostatic precipitator works on the principle of charged electrodes vertically aligned in a way that dust particles get positively charged from first electrode which can be present in the form of wire mesh or rods and then gets attracted to the negatively charged plates. Dust stuck with plates can be collected separately in collection hover using hammering process on the plates on the time of disposing particles.

Efficiency of Dust particle can be calculated through the formula given:

$$\eta = 1 - e^{\left(\frac{-WA}{Q}\right)}$$

η is the Fractional collection efficiency

W is the Terminal drift velocity in m / s

A is the Total collection area in m²

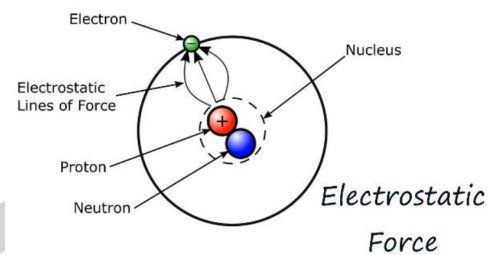
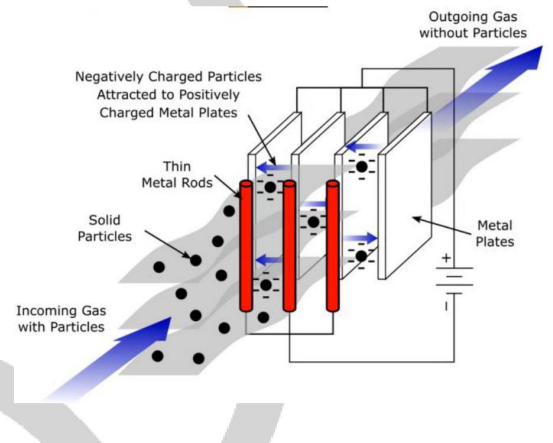
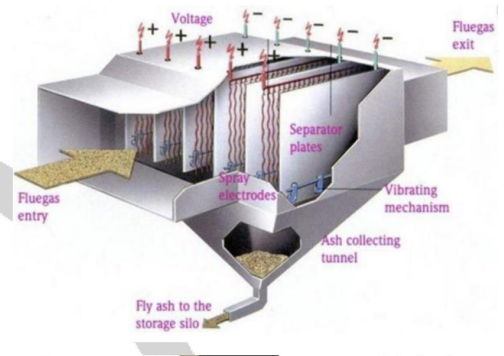
Q is the Volumetric air flow rate in m³ / s

Types of Electrostatic Precipitator

- Plate Electrostatic Precipitator
- Dry Electrostatic Precipitator
- Wet Electrostatic Precipitator
- Tubular Electrostatic Precipitator

Advantages

- The durability of the ESP is high.
- It can be used for the collection of both dry and wet impurities.
- It has low operating costs.
- The collection efficiency of the device is high even for small particles.
- It can handle large gas volumes and heavy dust loads at low pressures.



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Industrial Electrostatic Precipitator

Industrial Electrostatic Precipitator can be dry type or wet type precipitator used in engine rooms, thermal plants and metallurgic industries.



Sr.#	Model Number	Airflow (m ³ / hr)	Dimensions	Efficiency	Pressure Drop (pa)	Net weight (kg)
1	AQS3kI	3000-3500	1060 x 765 x 690	~99%	<120	120kg
2	AQS6kI	6000-7000	1060 x 1300 x 690	~99%	<120	188kg
3	AQS10kI	9000-10500	1060 x 1835 x 690	~99%	<120	244kg
4	AQS14kI	12000-14000	1060 x 1300 x 1380	~99%	<120	376kg
5	AQS18kI	18000-21000	1060 x 1835 x 1380	~99%	<120	488kg
6	AQS21kI	27000-31500	1060 x 1835 x 2070	~99%	<120	732kg

Commercial Electrostatic Precipitator

Commercial Electrostatic Precipitator can be tubular, dry type or wet type precipitator used in medical industries, ventilation of workspaces



Sr.#	Model Number	Airflow (m ³ / hr)	Dimensions	Efficiency	Pressure Drop (pa)	Net weight (kg)
1	AQS3kC	3000-3500	1060 x 765 x 690	~95%	<60	120kg
2	AQS6kC	6000-7000	1060 x 1300 x 690	~95%	<60	188kg
3	AQS10kC	9000-10500	1060 x 1835 x 690	~95%	<60	244kg
4	AQS14kC	12000-14000	1060 x 1300 x 1380	~95%	<60	376kg
5	AQS18kC	18000-21000	1060 x 1835 x 1380	~95%	<60	488kg
6	AQS21kC	27000-31500	1060 x 1835 x 2070	~95%	<60	732kg

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ESP Kitchen Hoods

Exhaust range hood is one of the important part of the ventilation system. Our hood style ESP is a special hood inside with electrostatic filters. The function is not only to extract the cooking smoke and grease vapor, but also to filter the cooking fumes and grease particles by electrostatic precipitator. ESP hood combines kitchen canopy exhaust hood with electrostatic filtration system which can be installed directly over the cooking appliance.



We can save the kitchen space, especially for those low and small kitchens. There is no need to buy extra kitchen smoke filtration system and also no need to buy the conventional hood, which can save the cost. The range hood material is all 304 / 202 stainless steel and its thickness is 1.0 mm, more strong structure than any others. Double pass purification, efficiency can be reached upto 98%. Digital intelligent high voltage power and control system is provided. Digital amperemeter display, grasping equipment operation accurately Whole stainless steel and dismountable structure, durable and easy on maintenance, installation and cleaning. Air curtain design, preventing smoke lateral leakage Our filtering cell is both sides fixed and cylinder length is 330 mm. That means more collected area, better efficiency. According to the different kitchen situation, we can offer customized service. More flexible and convenient for customers.

Sr.#	Model Number	Airflow (m ³ / hr)	Dimensions	Efficiency	Pressure Drop (pa)
1	AQS4KH	~4000	1600 x 1300 x 965	~98%	<120
2	AQS6KH	~6000	2000 x 1300 x 690	~98%	<120

