

High-Efficiency Kitchen Exhaust Electrostatic Air Cleaner





Treating Kitchen Exhaust Discharge for a Greener World



## **Treating Kitchen Exhaust Discharge**

An assessment carried out by the World Health Organization (WHO) has concluded that outdoor air pollution is carcinogenic to humans - with increased cancer incidence of the lungs and urinary tracts.

Discharges from kitchen exhaust systems contribute to outdoor air pollution too. Not only do they negatively impact the environment, they can cause public odor nuisance as well. Environmental laws worldwide have been clamping down on offenders and affected businesses often face severe fines and operation suspensions.

By treating the oil & grease, smoke, and odor from cooking processes, environmental impact and fire risks will be kept to the minimum. This will benefit all members of the community for many generations to come.

Let us pursue this green movement together and make our environment a better place for everyone to live in.











# **Electrostatic Precipitator's Working Principle**

High voltage ionizing wires charge the passing airflow, introducing polarity to the particles.

After the pollutants in the airflow are being entrapped, clean air is now obtained.

Oppositely-charged collection plates attract the charged particles towards them. Oil & grease, smoke, and odor molecules down to **0.01 micron** are electrostatically entrapped here.











## Why SCRUBBOX is Perfect

Air & Odor Management's (AOM) unwavering passion to make the world a cleaner, healthier, and greener place has put us on the relentless pursuit of delivering the best products and services through innovation, research, and improvisation.

SCRUBBOX protects the environment and its eco-system by using state-of-the-art Electrostatic Precipitation (ESP) technology to treat cooking pollution to the strict standards set forth by Environmental Regulators.



Incorporated UVC Irradiation and Activated Carbon Filtration options available

#### **Unrivalled Efficiencies**

Initial PAO Penetration(average)	1.3	%
Initial PAO Removal Efficiency(average)	PAIWAN 98.7	%

SCRUBBOX has been tested to possess filtration efficiencies of up to **98.7**% (ASHRAE 52.1), **97.9**% (ASHRAE 52.2), and **95.0**% (ISO 16890-2).

#### **Global Certifications**







SCRUBBOXhasworldwide-recognized **UL**, **ASHRAE**, **ISO**, **SGS**, **TUV**, **CE** and **FCC** certifications to attest for its superior safety, quality, and efficiency.

## **Stringent Quality Control**







Quality production and stringent quality check by our factory in Taiwan ensure that all SCRUBBOXes are made to the **highest of standards**.

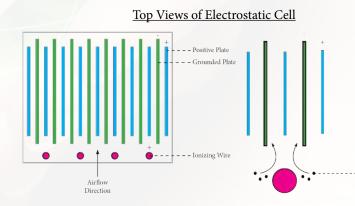
### **Heat Exchanger**





An incorporated patented Heat Exchanger regulates the temperature of the electrical components housed within to safeguard the lifespan of the equipment.

## **Short-Circuit Protection & Low Maintenance Design**



AOM's intuitive design allows for electrostatically-entrapped particles to flow downwards (due to gravity; into the collection tray) while maintaining the spaces between adjacent plates.

This significantly reduces the instances for short-circuiting to occur, and reduces overall maintenance for the electrostatic cell.

As a result, SCRUBBOX brings you:

- Better Electrical Protection
- Lower Maintenance Costs
- Less Static Pressure Build-Up to your Exhaust System (Better Energy Efficiency)











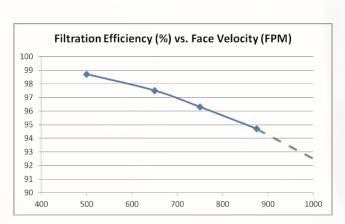
## **Third Party Filtration Test Reports**



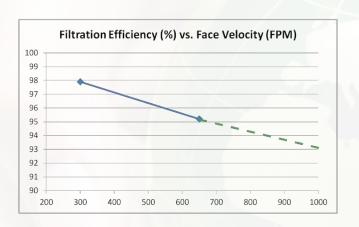
Cooking fumes can be seen at the exhaust outlet when SCRUBBOX is turned 'Off'.

Cooking fumes can no longer be seen at the exhaust outlet when SCRUBBOX is turned 'On'.

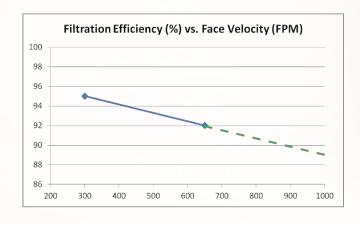
#### **ASHRAE 52.1-1992**



#### **ASHRAE 52.2-2017**



#### ISO 16890-2:2016



The high filtration efficiencies attained by SCRUBBOX puts it as the leading Electrostatic Precipitator in the market.

ASHRAE 52.1 test was conducted by Société Générale de Surveillance (SGS) in Taiwan, while ASHRAE 52.2 and ISO 16890-2:2016 (previously known as EN779:2012) tests were conducted by Blue Heaven Technologies in the United States of America.

Airflow Velocity	300 FPM	500 FPM	650 FPM	750 FPM	875 FPM	1000 FPM
ASHRAE 52.1-1992		98.7%	97.5%	96.3%	94.7%	92.5%
ASHRAE 52.2-2017 (0.3-1.0 um)	97.9%		95.2%			93.0%
ISO 16890-2;2016 (previously EN779:2012)	95.0%		92.0%			89.0%

# **Specification**

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Model	SCRUBBOX-150	SCRUBBOX-200	SCRUBBOX-300	SCRUBBOX-400	SCRUBBOX-600	SCRUBBOX-800	
Airflow	2,000 - 2,500 CMH	3,300 - 4,150 CMH	4,650 - 5,850 CMH	6,800 - 8,500 CMH	10,200 - 12,850 CMH	12,850 - 16,000 CMH	
Dimension	491L x 425H x 610D	550L x 650H x 690D	530L x 650H x 930D	550L x 650H x 1170D	550L x 650H x 1640D	550L x 650H x 2100D	
Weight	38 kg	60 kg	75 kg	90 kg	120 kg	160 kg	
Pressure Loss	50 - 100 Pa						
Voltage	220-240 V; 50/60 Hz						
Power	0.066	6 kW	0.088 kW		0.15 kW		
Certification	ation UL, ASHRAE, ISO, SGS, TUV, CE, FCC						
Efficiency	Up to 98.7% (ASHRAE 52.1); 97.9% (ASHRAE 52.2); 95.0% (ISO 16890-2)						
Power Cut-Off	Whenever Door is Opened						
BMS Output	2; Power & Fault						
Cabinet	1.5 mm Powder-Coated Electro-Galvanized Steel						





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