

# TJERNLUND

## **SANTEK** Electronic Air Cleaners



*The effective way  
to control indoor  
air quality*



# An effective electronic air cleaner helps protect your employees, customers and bottom line

## Indoor air quality affects everyone

We spend up to 90% of our time indoors and are surrounded by natural and man-made pollutants that threaten our comfort and health. Tighter constructed buildings seal out weather, but also seal in pollutants such as pollen, tobacco and cooking smoke, dust, mites, dander, spores, viruses and off-gassing from building materials and furnishings.

## Electronic air cleaning is a wise investment

Controlling indoor air quality has many health and financial related benefits including:

- Healthier employees
- Higher productivity
- Happier customers
- Reduced cleaning of office equipment and facilities
- Lower facility heating and equipment maintenance costs

## Santek Electronic Air Cleaners provide a breath of fresh air

*There's a model to fit your requirements*



**SD-1000**



**SX-2000**



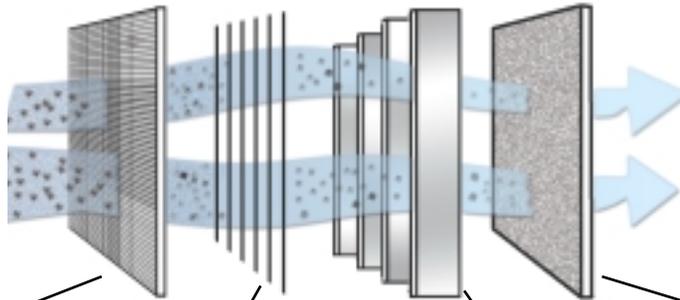
**SP-1200**

<b>Efficiency</b>	Up to 95% clean air in a 12,000 cubic ft space at 5 air changes/hour. (ACH)	Up to 95% clean air in a 24,000 cubic ft space at 5 air changes/hour. (ACH)	Up to 95% clean air in a 14,400 cubic ft space at 5 air changes/hour. (ACH)
<b>Air Flow Capacity</b>	Up to 1,000 cubic feet per minute (CFM)	Up to 2,000 cubic feet per minute (CFM)	Up to 1,200 cubic feet per minute (CFM)
<b>Collecting Cells</b>	1 ionizing collecting cell made of heavy duty .040" aluminum for long life	2 ionizing collecting cells made of heavy duty .040" aluminum for long life	2 ionizing collecting cells made of heavy duty .040" aluminum for long life
<b>Filters</b>	1 aluminum mesh prefilter; 1 activated charcoal for odor control	2 aluminum mesh prefilter; 2 activated charcoal for odor control	1 polyester 22% efficient prefilter; 2 activated charcoal for odor control
<b>Blower Speed Motor Specs</b>	3-speed 500/750/1000 CFM, 2.92 Amps, 1085 RPM, PSC	3-speed 1000/1500/2000 CFM, 2 @ 2.92 Amps, 1085 RPM, PSC	Variable speed 500-1200 CFM, 2 Amps
<b>Power</b>	115 V, 60 Hz, 350 Watts, Solid state 6,000 VDC power supply, 6' power cord	115 V, 60 Hz, 650 Watts, Solid state 6,000 VDC power supply, 6' power cord	115 V, 60 Hz, 240 Watts, solid state 6,000 VDC power supply, 6' power cord
<b>Control Panel</b>	LED indicator light shows proper operation	LED indicator light shows proper operation	LED indicator light shows proper operation
<b>Physical Description</b>	70 lbs. ship, Ceiling or Wall mount options. 13" H, 22 1/4" W, 16 1/2" D	120 lbs. ship, Ceiling mount. 14" H, 24" W, 32 1/4" D	110 lbs. ship, Flush in Ceiling mount. 9 1/2" H, 22 3/4" W, 46 3/4" L
<b>Finish</b>	16 gauge steel black finish	16 gauge steel black finish	18 gauge off white textured

# Santek electronic air cleaners remove particles 88,000 times smaller than the period at the end of this sentence.

*4-stage filtration removes dust, smoke and odors that standard filters can't*

Standard air filters clean only a small percentage of the air we breathe. Smoke, dust, pollen, bacteria and other contaminants flow through and are recirculated into the air. Using a 4-stage filtration process, Santek electronic air cleaners remove up to 95% of all contaminants.



### Stage 1:

Aluminum mesh or polyester pre-filter removes larger particles to reduce electronic collecting cell maintenance and to extend life of activated charcoal filter.

### Stage 2:

Remaining particles go through ionizing section where they receive an electrical charge.

### Stage 3:

Collecting cells with oppositely charged electronic plates attract and collect charged particles like a high powered electromagnet.

### Stage 4:

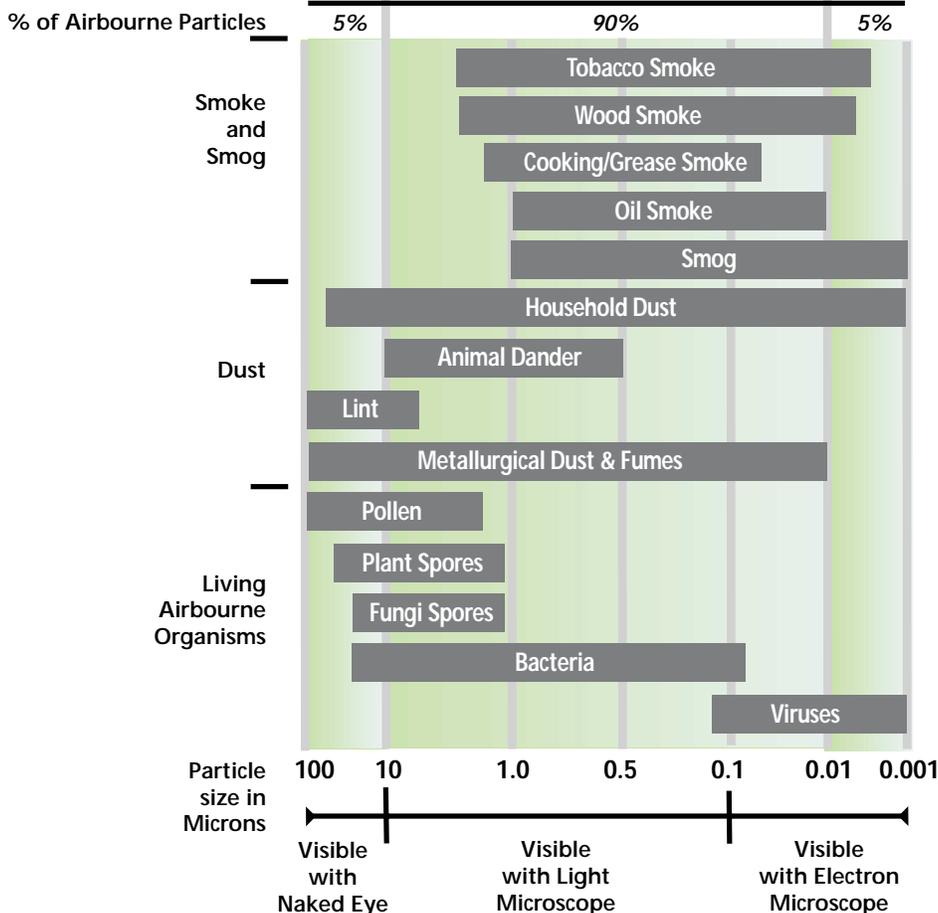
Activated charcoal filter adsorbs most of the remaining particles, removing residual odors before finally recirculating 95% cleaner air back into interior space.

## Airborne Particle Removal Efficiency Chart

### Filters

95% Efficient Santek Electronic Air Cleaner

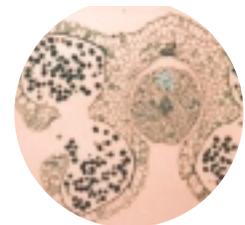
Standard Filter



*Some things you're probably glad you don't see every day!*



**Dust Mite & Debris**  
.5 to 60 microns



**Pollen**  
3 to 100 microns



**Bacteria**  
.1 to 30 microns

## Santek Air Cleaner Sizing

The first step in selecting the proper Santek air cleaner is to determine the volume of air that needs to be filtered. Volume is determined by multiplying the length x width x height to arrive at cubic feet. The cubic footage is divided by 60 to arrive at the CFM (Cubic feet per minute) necessary for one complete air cleaning per hour. The final step is to multiply the CFM value by the recommended number of air cleanings per hour to arrive at the total CFM necessary to properly clean the air in the establishment.

### Example:

Conference room measuring 20' x 25' with an 8' ceiling.

$$\frac{(20 \times 25 \times 8)}{60} \times 8 \text{ Desired Air Cleanings per hour} = 533 \text{ CFM}$$

The selected air cleaner would need a minimum capacity of at least 533 CFM to clean the room 8 times per hour.

### Examples of guidelines for recommended air changes per hour:

Common Applications	Pollutant Concentration	Recommended Air Changes Per Hour
Homes & Offices	Average	5-7
Restaurants & Mtg. Rooms	Above Average	8-10
Bars & Smoking Areas	Heavy	10-12

## A Proper maintenance schedule is a must

Regular cleanings of prefilter screen and collecting cells are necessary for proper operation. In installations where there is a high level of pollutants like cigarette smoke, cleanings should be more frequent. A non-alkaline based detergent or cleaning solution should be used to properly clean cells for extended life and peak efficiency. Santek has manufactured electronic air cleaners for over 30 years and many early models are still operating under peak efficiency with proper maintenance.

## Accessory items also available



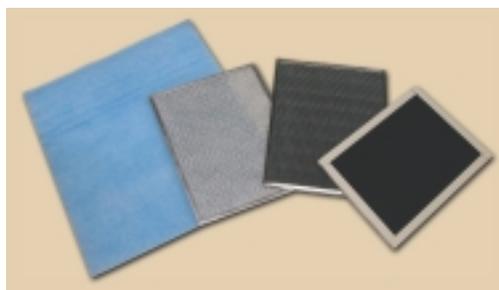
Prefilters should be cleaned or replaced and activated charcoal filters should be replaced on a regular basis for consistent odor removal. Santek activated charcoal filters are matched with Santek air cleaners to deliver optimum performance and fresh air.

Ceiling or wall mount kits also available.

## Distributed by:

## Typical applications where Santek Air Cleaners help clear the air of common pollutants

Applications	Odors	Dust	Cigarette & Cooking Smoke	Viruses & Bacteria
Restaurants/Bars	•	•	•	•
Bingo Halls	•	•	•	•
Printing/Photo Finishing	•	•		•
Beauty Parlors/Salons	•	•		•
Offices	•	•	•	•
Daycare/Classrooms	•	•		•
Retail Stores/Showrooms	•	•		•
Pet Stores/Vet Clinics	•	•	•	•
Health Clubs/Locker Rooms	•	•	•	•
Computer Rooms		•		•
Medical/Dental Labs	•	•		•



## Assistance is just a phone call away

For complete application information or assistance in sizing the proper Santek Air Cleaner for your application, call Tjernlund Products at 1-800-255-4208 or visit our web site at [www.tjernlund.com](http://www.tjernlund.com).



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