Air Purification
Fine Dust - HEPA/ULPA
Sterionizer™ - Ion Technology






Fine Dust Filter

Final Filter for Fan Filter Units

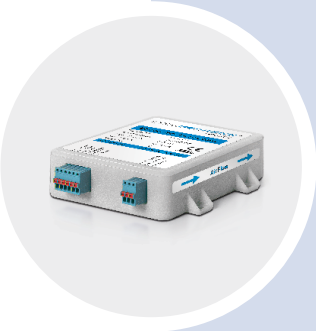
Final Filter for Clean Rooms

Final Filter for Channel Installations

Highly Active Filter Surface – Low Pressure Drop

Final Filter for Grid Systems

Sterionizer™ Ionization



Fine Dust - HEPA / ULPA

FILT AIR Ltd.

Fine Dust Filter

Final Filter for Fan Filter Units

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Final Filter for Channel Installation

Highly Active Filter Surface - Low Pressure Drop

Final Filter for Grid Systems

Company Profile:

Filt Air Ltd. specializes in the production of air filtration products for the supply of clean air. Our wide range of products is designed to provide superior quality, while offering both safety and reliability for product availability at an optimum price.

In 1998 Beth-El Zikhron Yaaqov Industries Ltd. separated the clean room business from the NBC filtration branch by founding the subsidiary Filt Air Ltd. Based on the knowledge and expertise of the mother company, we offer a large range of filters to suit our customer's needs for all applications.

After the company was established, the product range was expanded to meet the full range of the local market requirements.

We offer advanced technologies and skilled application expertise for the supply of clean air in clean rooms for high-tech industries, such as the microelectronics and pharmaceutical industries.

Our customers include: hospitals, industrial plants, commercial buildings, and companies requiring clean air for gas turbine filtration.

Our success is based on a collaborative development process between the needs of our customers and the quality specifications of our suppliers.

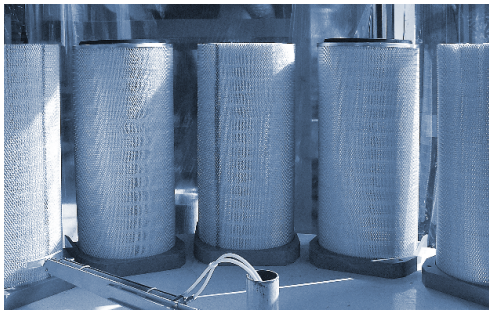
This close cooperation and open dialogue is essential to achieve optimal clean air solutions.

Quality:

We have established a quality policy which aims to satisfy our customers, who are enthusiastic about our solutions for their filtration needs by providing them with the highest quality and reliability in filtration products. Since 2001 we have worked towards this goal by operating and maintaining a comprehensive quality control system based on our certified Quality Assurance System ISO 9001 (registered IQNet number IL-24203).

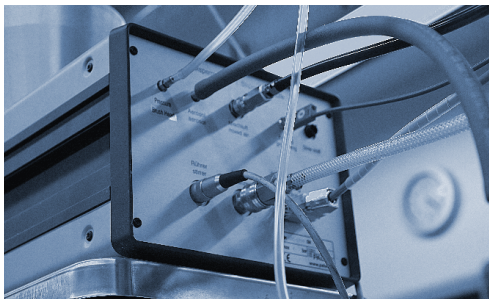
All of our employees have been instructed and involved in the quality achievement process because we believe that trained and qualified employees are the basis for successful operations and innovations.

Filt Air Ltd. focuses on quality assurance of: the raw material, the production process, and the finished products.



Carefully selected materials, combined with quality engineering and workmanship, guarantee excellent performance, long lifetime, and long standing quality.

The products are designed, manufactured, and tested in accordance with established international standards.



Research & Development:

In order to grow continuously with our customer's demands, our R&D department stays up-to-date with the latest standards of technological advancement. In recent years, an intense process of standardization, testing methods, and classification of systems have been developed for all types of filters.

To guarantee that our filters meet the requirements of these standards, in terms of quality and effectiveness, we send our filters to independent laboratories that work in accordance with international standards of test procedures.

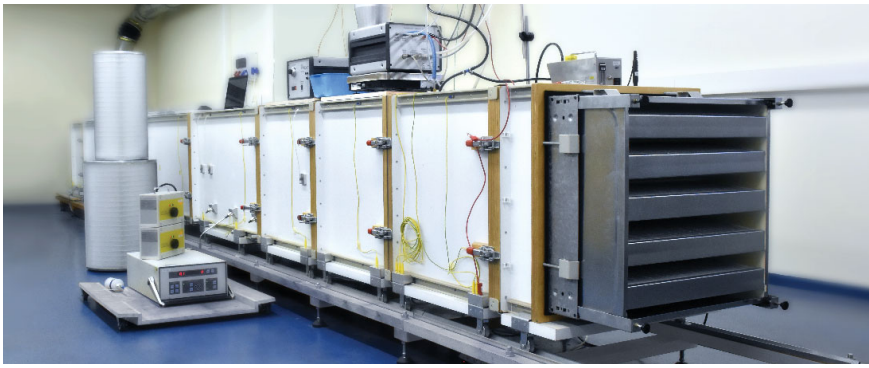
Our research and development aims to produce products that are economically efficient, with low capital expenditures and minimal operating costs.

Creating an environment-friendly process is a high priority. In developing our products, we actively seek innovative ways to ensure the protection of the environment.

Sales:

The close cooperation between the customer, sales and development (R&D) departments makes it easy to meet the specific demands of each standard and the market, without undue time delay.

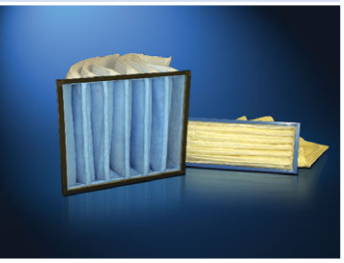
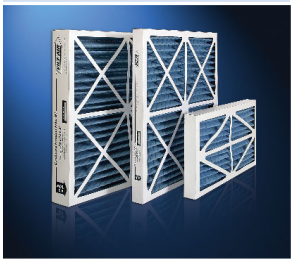
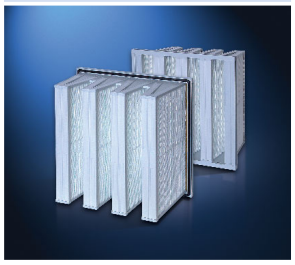
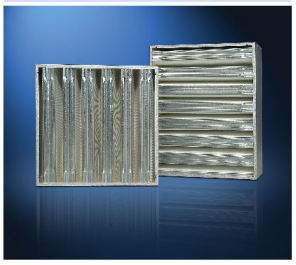
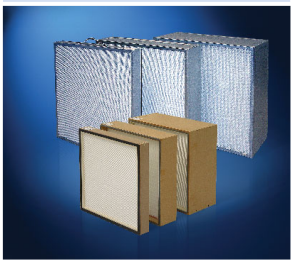
Our experienced personnel will guide you through the labyrinth of different filtration systems, whether choosing the right filter type or designing your system based on the requirements of your applications.



We know that the optimum clean air solution is reached, only when it is adapted to each individual case.

We are certain that our experts will find the right solution for your application needs, whether it's for pre-filtration, HEPA / ULPA filtration, or for an individually designed installation. Customer satisfaction is our highest priority. Product quality cannot and will not be compromised.

Filt Air Product Survey

G80 Compact Filters	G90 Compact Filters	GV Compact Filters	GW Compact Filters	G7 Compact Filters
Coarse and fine dust filters in various constructions	Filter pads and filter panels with various prefilter medias	Rigid filter with flange connection with fine dust or HEPA micro fibreglass media. (21.4 m^2)	High airflow compact filter with fine dust or HEPA micro fibreglass media	Fine dust and HEPA compact filter with rigid steel frame alu-zinc coated or MDF frames
				
Frame Material: • Metal • Polystyrene	**Frame Material:** • Cardboard • Metal	**Frame Material:** • Full Plastic	**Frame Material:** • Coated steel frame with alu-zinc coated profiles • MDF frame with alu -zinc coated profiles	**Frame Material:** • Steel frame alu-zinc coated • MDF frame
Frame Heights: 300 mm - 915 mm	**Frame Heights:** 2", 4"	**Frame Heights:** 292 mm	**Frame Heights:** 292 mm	**Frame Heights:** 60mm-292 mm
Max. Flow Rate: • Up to 2.4 m/s	**Max. Flow Rate:** • Up to 3.4 m/s	**Max. Flow Rate:** • Up to 3.9 m/s	**Max. Flow Rate:** • Up to 2.5 m/s (HEPA) • Up to 3.0 m/s (fine dust)	**Max. Flow Rate:** • Up to 1.5 m/s (fine dust)

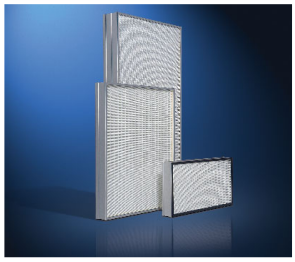
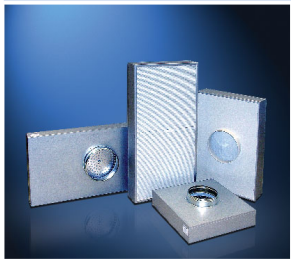
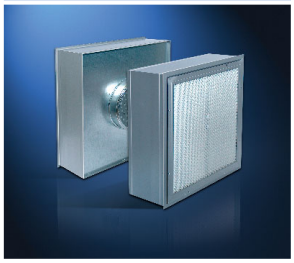
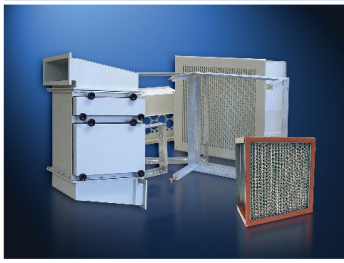
High Quality Controls ensure Standardized Quality

Each HEPA and ULPA filter is tested and packed in accordance with one of the following test methods:

- European standard EN 1822-1, 4&5 (Testing filter elements HEPA and ULPA efficiency and scan method).
- American standard IEST-RP-CC001.3 (HEPA and ULPA filters)
- Oil thread test according DIN 24184
- Other customer requested testing
- Option - the global standard ISO 29463

Our fine dust filters are also checked with one of the following test methods:

- European standard EN 779 particulate air filters for general ventilation based on ASHRAE 52.1 (Gravimetric and Dust-Spot Procedures for Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter 1992).
- New global standard ISO 16890
- Other customer requested testing

GP Panel Filters	GT Terminal Filters	HT Terminal Housing with Panel Filter Insert	GR Cylindrical / Conical Filters	High Temp Filters and HO Frame & Housing \ Accessories
Fine dust and HEPA / ULPA panel filter with extruded aluminium profile frame	HEPA terminal filter with different collar sizes and damper systems. Optional walk-able version available	Terminal Housing with different Panel Filter. Inserts changeable from room-side	Special pulse cleanable cylindrical /conical filters for gas turbine application	Fine dust / HEPA filter holding frames, duct-housings and safe exchange solutions
				
Frame Material: • Extruded anodized aluminium	**Frame Material:** • Extruded anodized aluminium	**Frame Material:** • Extruded anodized aluminium	**Frame Material:** • Zinc coated steel	**Frame Material:** • Powder coated steel • Stainless steel
Frame Heights: 70 mm - 153 mm	**Frame Heights:** 130 mm	**Frame Heights:** 197 mm	**Frame Heights:** 660 mm	
Max. Flow Rate: • Up to 1.5 m/s (HEPA) • Up to 2.4 m/s (fine dust)	**Max. Flow Rate:** • Up to 0.5 m/s (HEPA)	**Max. Flow Rate:** • Up to 0.5 m/s (HEPA)		

Our filters undergo checks for almost all possible filtration test methods such as:

- Leak testing and scanning
- Overall efficiency testing
- Initial pressure drop and bursting limits
- Air distribution testing
- External reference testing and certification

The diverse filter types undergo additional checks in a special filter testing channel for:

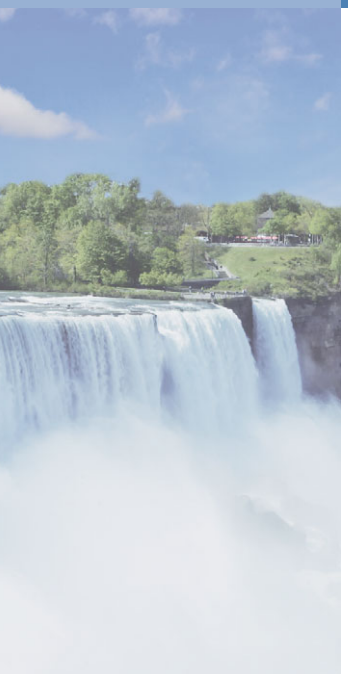
- Bursting pressure
- Initial pressure
- MPPS definition
- Overall efficiency
- Special developing tests

Fine Dust - HEPA / ULPA

APPLICABLE STANDARDS:

- **EN 1822-5**
- **IEST-RP-CC0001.3**
- **EN 779**
- **ASHRAE 52.1**
- **ISO 9001:2015**
- **ISO 16 890**
- **ISO 29 463**

FILT AIR®



STERIONIZER™

Healthy Indoor Air...

The Way Nature Intended

The Sterionizer™ disinfection concept

The Sterionizer™ Disinfection Concept is an excellent solution for all food processing, food packaging and food storing areas with critical requirements of air purity and sterility.

The system ensures reliable and consistent conditions preventing the build-up of germs and bacteria.

The basic principal is the permanent flushing of the area with clean air reinforced with positive and negative ions.

These charged oxygen molecules O_2+ and O_2- have high chemical activity and when reacting with water molecules in the air, OH radicals and H_2O_2 (Hydrogen Peroxide) are formed. A chemical reaction occurs and oxidants break down the protein structure of pollutants, rendering them harmless.

This process enables halting and controlling the growth of microbes and bacteria in a particular area.

Sterionizer™ system keeps air ducts, air heat exchangers and machinery clean and supplies sanitized air in enclosed areas..

Each ionizing device is completely maintenance free and connected to a data-bus for supervision and monitoring.

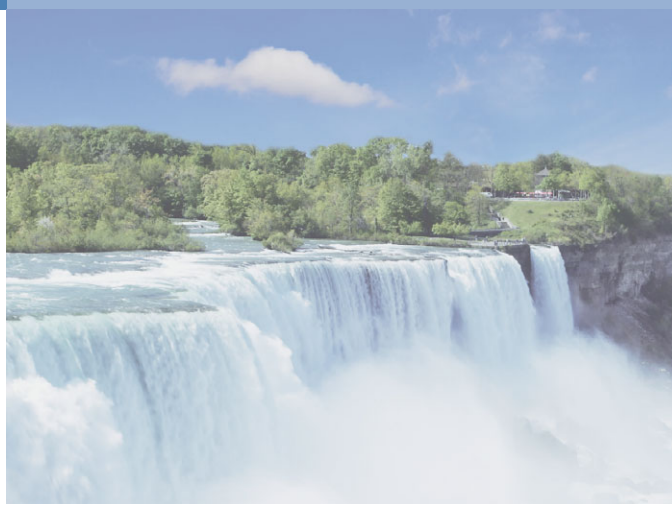
The Sterionizer™ Duct Unit

The Sterionizer™ Duct Unit is designed for adding ionizing technology into air ducts and other closed areas with an air flow.

The unit is maintenance free with innovative patented self-cleaning emitters. In addition, the unit includes a Modbus communication port that can easily be connected to any building management system.

It is easy to install the unit in any duct utilizing the pre-drilled flange and factory applied gasket.

When installed at appropriate points, the unit keeps the duct system clean and ensures that the air supplied is ionized.



Bi-Polar Ion Technology

Improving Indoor
Air Quality (IAQ)

The Sterionizer™ Ion Bar

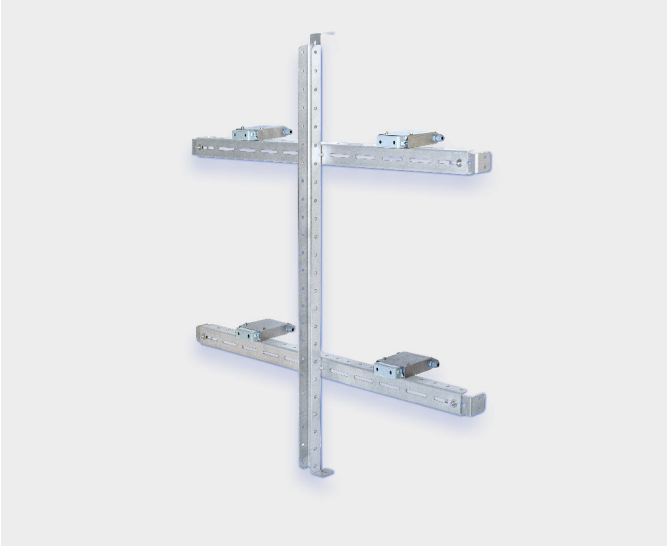
The Sterionizer™ Ion Bar is designed for adding ionizing technology into large air duct installations and other closed areas with an air flow.

In order to treat air within a closed space, the Sterionizer™ Ion Bar must be located in front of an air outlet.

To keep the air duct or the heat exchanger in the air duct clean and hygienic, the Ion Bar is installed at appropriate points.

For remote servicing each Sterionizer™ is equipped with a Modbus interface that can be connected to the Sterionizer™ system software or to a building management system.

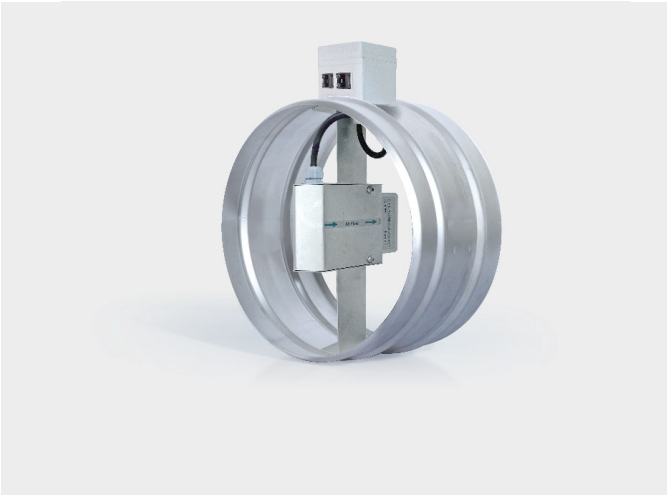
The Sterionizer™ Combi Rack



The Sterionizer™ Combi Rack is a modular mounting system for Sterionizer™ units designed for the placement of Sterionizers™ in Air Handling Units (AHU's) and similar spaces with an air flow.

In order to keep heat exchangers and other equipment clean and hygienic the Sterionizer™ units must be placed at relevant points. Using the modular profiles it's easy to build an individual structure.

The Sterionizer™ Tube Unit



The Sterionizer™ Tube Unit is designed to add ionizing technology into round air duct systems.

One Sterionizer™ D6 unit is located in the center of the ring and generates ions. The Tube Unit generates ions, distributes them through the airflow and sub-sections then out to the indoor space.

Ring size is customized per order to customer requirments. The tube is made of stainless steel.

- **The Filt Air XY-scan testing device is able to perform automated filter leak testing of high efficiency air filters using automatic particle counters and a motorized scan table.**
- **While the particle counter probe passes over the filter face, the computer compares the counted particles with the given leak tolerance setting.**
- **In addition, it calculates the overall efficiency for each checked**

XY-Scan Testing Device

The **Filt Air XY-Scanner** is a CNC controlled testing unit in compliance with EN 1822.

Filt Air's laboratory uses only latex particles (PSL) in different sizes for optimized MPPS measurements. Each tested filter receives a test certificate (COT) with all measured values on it.

Filt Air filters in efficiency survey (filter classification)

	EN779 Class	ISO 16890	(ASHRAE 52.1)	Filter Codes	
Coarse Dust Filters (G)	G1		Merv 1 Am < 65	—	
	G2		Merv 2-4 65 < Am < 80	Na0 G 90	
	G3	ISO coarse > 80 %	Merv 5-6 80 < Am < 90	Na0 G 90	
	G4	ISO coarse > 90 %	Merv 7-8 90 < Am	G90, G80	
Fine Dust Filters (F)	M5	ISO ePM10 50% - 65%	Merv 9-10 40 < Em < 60	—	
	M6	ISO ePM10 65% - 85%	Merv 11-12 60 < Em < 80	GV, GW, G7 GP, G90, G90	
	F7	ISO ePM2.5 65% - 80% (ePM1 > 50%)	Merv 13 80 < Em < 90	GV, GW, G7, GP, G80	
	F8	ISO ePM1 65% - 85%	Merv 14 90 < Em 95	GV, GW, G7 GP, G80	
	F9	ISO ePM1 > 80%	Merv 15 95 < Em	GV, GW, G7, GP	
HEPA/ULPA Filters (H/U)	**EN1822 Class**	**ISO 29463**	**Eff.(%) @ MPPS**	**Eff.(%) @ 0.3 µm**	
	E10	—	> 85	> 95	GP, GT, HT, G7, GV, GW
	E12	ISO 25E	> 99.5	> 99.95	GP, GT, HT, G7, GV, GW
	H13	ISO 35H	> 99.95	> 99.995	GP, GT, HT, G7, GV, GW
	H14	ISO 45H	> 99.995	> 99.9995	GP, GT, HT, G7, GV, GW
	U15	ISO 55H	> 99.9995	> 99.99995	GP

Am% = Average arrestance for course dust filter G1 - G4.
Em% = Average efficiency for fine dust filter F6 - F9.

Eff = Initial fractional efficiency for HEPA / ULPA filters.
MPPS = Most Penetrating Particle Size.

The ISO 16890 records their performance at a particular spectrum of 0.3 to 10 microns.

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