

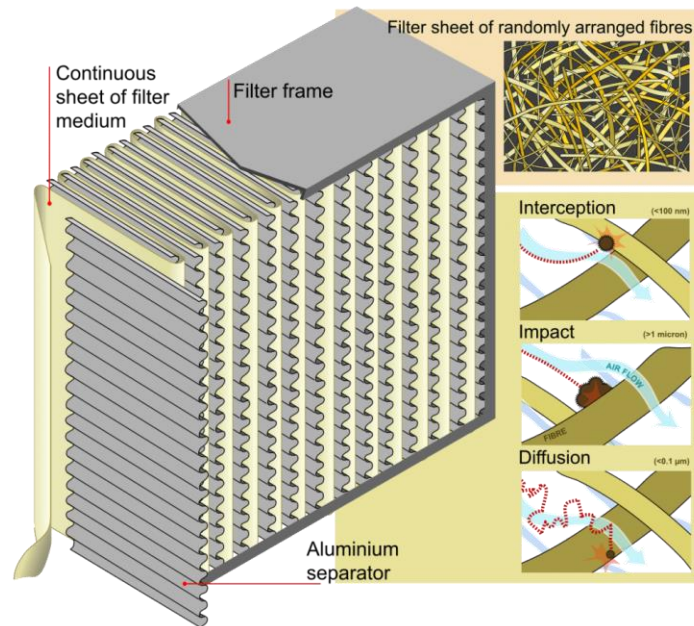
HEPA (High-Efficiency Particulate Arresting) filter is a filter that can remove 85% of the particles in the air up to 0.3 microns. Filters with 99.97% efficiency ratio are called True HEPA filters. Those slightly below this ratio are called HEPA filters. Filters with a rate of 99.99% are called ULPA filters.

The first original HEPA filter was designed in the 1940s at the Manhattan Project to prevent the spread of radioactive waste in the air. It was commercialized in the 1950s and the original term became a registered brand and became the general term for high-impact filters. Over the decades, filters have evolved and become very, very highly successful for the air quality demanded in different high-tech industries and environments. These include space exploration, the pharmaceutical industry, hospitals, healthcare, nuclear fuels, nuclear power, and electronic microcircuits (in computer chips).

HEPA filters are divided into classes:

E10	> 85%	—
E11	> 95%	—
E12	> 99.5%	—
H13	> 99.95%	> 99.75%
H14	> 99.995%	> 99.975%
U15	> 99.9995%	> 99.9975%
U16	> 99.99995%	> 99.99975%
U17	> 99.999995%	> 99.9999%

The higher the numerical value after HEPA means a higher the dust – particle retention value.



HEPA filters are generally produced in 2 types.

1- Disposable HEPA filters

2- Cleanable HEPA filters

Disposable HEPA filters should be replaced within 1 to 1.5 years, depending on the environment air pollution and frequency of use. Dust bag-shaped ones should be changed when they are full or close to full.

HEPA Filtering performances

As the HEPA filters are used, they do not lose anything from their filtering performance over time, on the contrary, the filtering performance increases as the filter is used, so you can always rely on the filtering performance of the HEPA filters (for example, a 99.97% HEPA filter goes up to 99.97% or more with use).

HEPA Filters are used in operating rooms, hospitals, clean room applications and even in airplanes due to their filtering performance reliability and maintenance-free structure.