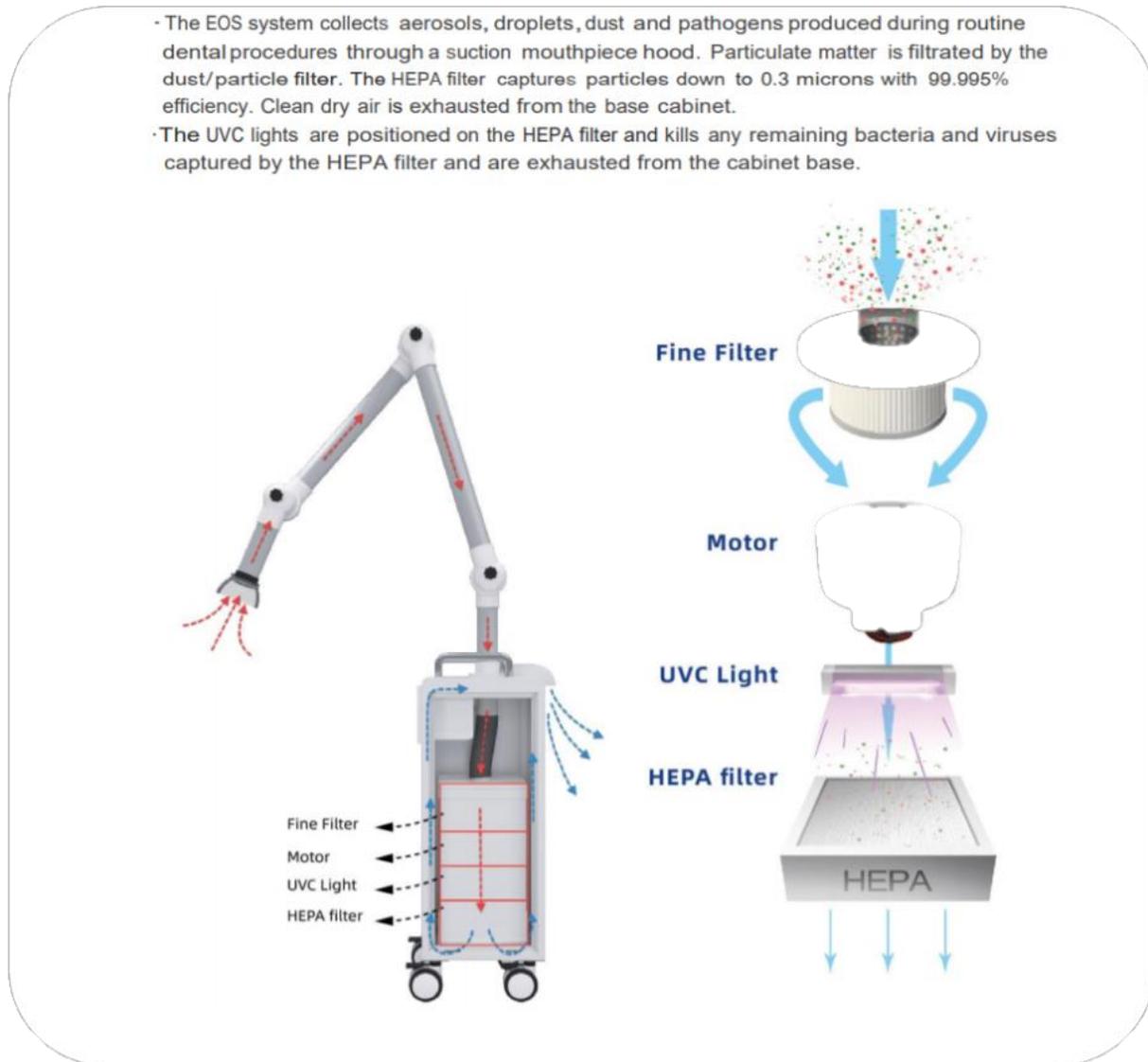
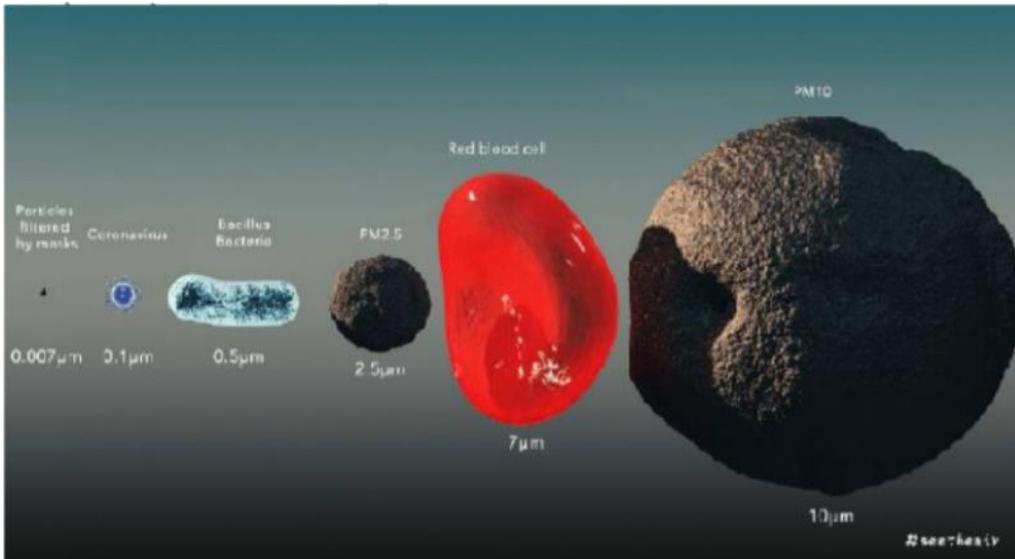


Ajax Extra Oral suction units. These are medical grade H-14 HEPA filtration system with UV-C light which stops virus and bacteria -> 0.3 microns with a 99.99% efficiency



HEPA (High Efficiency Particulate Air Filter) HEPA is an acronym which stands for High Efficiency Air Particulate, which is made by the fiberglass that is a disorder fibrous mat arranged. The fiberglass caliber is 0.5~2.0 micron and its high level of filtration efficiency for the smallest as well as the largest particulate contaminants can stop virus and germs $\geq 0.3\mu\text{m}$ with 99.995% efficiency. The HEPA filter is developed during the period of the Manhattan Project that belongs to the US Nuclear Weapons Development, and it was used to capture extreme and dangerous radioactive particles. Nowadays, when scientists found out its high efficiency for capturing Droplets, Aerosols, and the particles of Bacteria & viruses, the HEPA filter is used in the medical industry at large. Will the smallest viruses pass through the HEPA filter? As the Filtration Mechanisms we learn above, the 0.3-micron benchmark is used in efficiency ratings, because it approximates the most difficult particle size for a filter to capture. HEPA filters are even more efficient in removing particles that are smaller than 0.3 microns and larger than 0.3 microns. The fact that a HEPA filter's removal efficiency increases as particle size decreases below 0.3 microns is counter intuitive. However, this is a proven and accepted fact in the filtration sciences. The virus sizes are within with $0.02\mu\text{m}\sim 0.3\mu\text{m}$. The corona virus size is $0.15\mu\text{m}$ around. Both of them are captured by the HEPA filter through the diffuse and static effect.

In ISO16890, European standard EN 1822:2009, EN 779:2012 and DOE-STD-3020- 2015 Specification for HEPA Filters Used by DOE Contract



HyperHEPA Filtration - IQAir HealthPro Series

The IQAir HealthPro Series features HyperHEPA filtration technology for superior airborne particle removal. IQAir's HyperHEPA filtration is tested and certified by an independent third-party lab to effectively filter 99.5% of harmful ultrafine pollution particles down to 0.003 microns in size. This is 100 times smaller than what is achieved with ordinary air filtration technology and 10 times smaller than a virus.

Up to 25% more clean air

The New Edition HealthPro features the most powerful fan ever used in a residential room air purifier for even better air cleaning results. The new three-dimensionally optimized design now uses state-of-the-art aerodynamics to convert energy into more air and less noise. We also improved the HyperHEPA® filter pleating design, which increases the filter surface area of the filter. The result of these improvements is up to 25% more clean air.



3D UltraSeal

Internal leakage drastically reduces the actual efficiency of most air cleaners. IQAir systems feature patented triple sealing technology for maximum total system efficiency:

- Unique manufacturing process ensures filter media is 100% sealed in the filter frame.
- Patented 3D UltraSeal ensures perfect knife-edge-in-groove sealing between filter frame and housing.
- Individual seals on each housing module ensure airtight housing.

