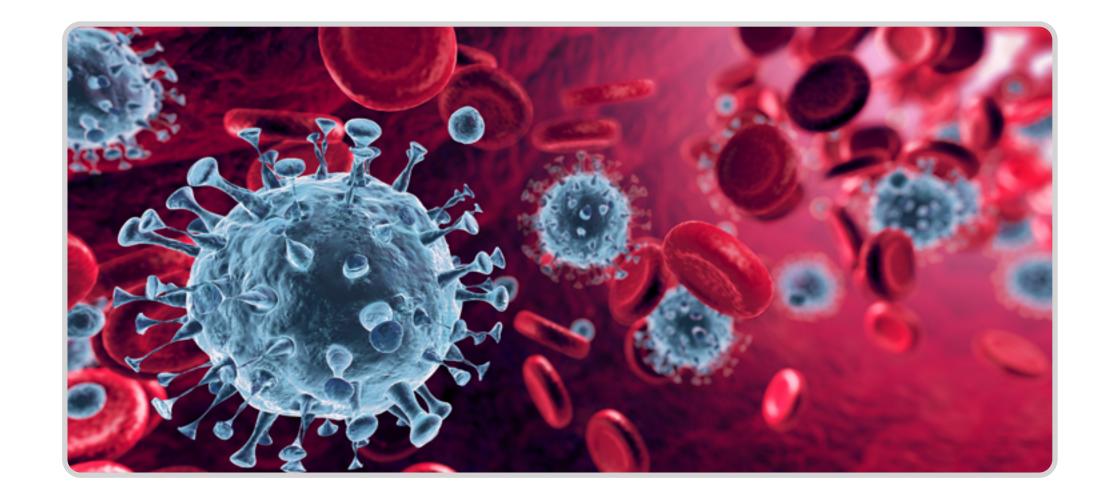
# CAN AIR FILTERS HELP WITH CORONAVIRUS CONTROL?



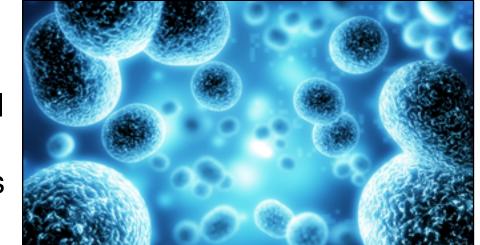
TECHNICAL BULLETIN 10





Since the outbreak of the Coronavirus (COVID-19) we have been asked the question; can we upgrade our filters to reduce the risk of Coronavirus infection spreading through our air-conditioning system?

The virus itself is very small, in the range of 0.01 and 0.1 microns and as such will not be stopped by regular ventilation air filters. Jasun Envirocare do manufacture ULPA and HEPA filters which will stop the virus, but these are best used for applications where the infection is being controlled or investigated such as hospitals, public health laboratories and similar environments. In these cases it is likley that the end user will want a "safe change" filters system, also known as bag-in-bag-out.



In most cases it is simply not possible to easily upgrade existing ventilation systems to accept HEPA or ULPA filters

This is not because we don't want you to do so, it is because ventilation systems are designed and installed as a whole and the air resistance generated by a HEPA or ULPA filter is large by some magnitudes than regular filters. Typically HEPA filters are considerably deeper than regular panel filters. In addition to achieve HEPA or ULPA filtration requires the filter framing system to be much more airtight than regular systems.

However there are actions we can carry out which might help to reduce infection spreading



In a Bag-In-Bag-Out sytem the HEPA filter is never touched by the operative and so any contamination is contained.



## SO WHAT CAN WE DO?

It is possible to upgrade existing systems quite easily to panels filters or bag filters rated ePM1 >80%.

We are still finding out new information about Coronavirus, however the latest information is that the virus itself is not airborne. It needs to grab a ride on either water droplets (coughs and sneezes) or on particulate matter PM's. It is the case that particulate matter in the range of ePM1 and ePM2.5 will go right through coarse filters (G1-G4 to the old EN779 standard), but will on the whole be stopped by a decent ePM1 >80% filter (in old terms F8/F9).

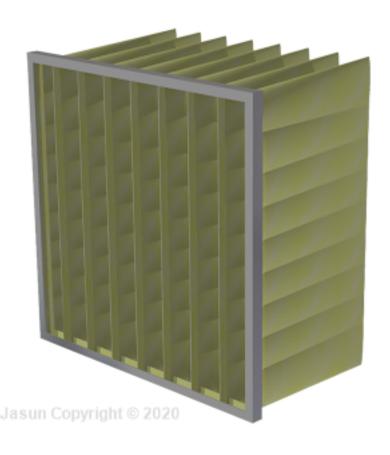
The danger is that many heating and ventilation systems rely heavily on recirculating air, and as has been shown on cruise ships and other closed environments this will potentially allow the virus to spread from room to room.

When upgrading a filter system it is likely that the clean pressure drop will be higher than the previous filters, however this is to be expected as the filters are stopping smaller particles.













# FACTORS TO CONSIDER WHEN DESIGNING NEW SYSTEMS

Regular applications such as small offices meeting rooms or canteens

Higher risk applications such as medical facilities, schools, areas with a larger public throughput such as courtrooms, council offices.

High Risk applications such as public health laboratories, medical containment areas.

ePM1 >80%

EN1822: E12 EPA E

EN1822:H13 HEPA









## Why choose Jasun Envirocare Plc?

The scale and scope of Jasun Envirocare enables us to provide customers with an all-in-one package of reduced filter costs,

contamination prevention, improved IAQ and enhanced service life cycles.

As one of the UK's largest air filter manufacturers, Jasun Envirocare Plc provides a complete range of air filters and systems.

We are committed to continuous environmental improvement. Our objective is to progressively introduce measures that optimize energy efficiency gains and prevent pollution and, in so doing, reduce the environmental impact of the industries we serve.

What makes us special...

- Our in-house expertise puts us at the forefront of innovation in the commercial air hygiene and water treatment industry.
- We provide a UK wide 'one-stop-shop' for filter supply, distribution and installation to meet all commercial air hygiene and water treatment needs.
- We deliver clean air where it matters.
- We provide air filters, clean ductwork, monitor indoor air quality and validate Clean Rooms.
- We manage water hygiene systems by monitoring, cleaning and refurbishment of commercial water systems.
- We have a proven track record in providing fast turnaround, from order to delivery: including a comprehensive European wide filter supply facilities.
- As the only filter company with a UK located IS16890 Test Facility we are able to manufacture and supply filter products that meet International Organisation for Standardisation (ISO) and European (Eurovent) requirements.
- We provide a customer care and advice service that is rapid in its response and effective in meeting the challenge.

### Why is it important to choose a Eurovent Certified Company for your Air Filters?

Now more than ever it is important to know that the filter you are buying will perform to the levels that the filter manufacture is claiming. Eurovent certification is your guarantee of performance. There are many counterfeit filter medias available which simply will not meet the standards claimed. Indeed many filter suppliers are not even able to test their filters to the latest standards and so are unable to guarantee filtration levels.



#### Jasun Envirocare PLC tests to EN16890 and EN1822?

As the UK's longest established Air Filter manufacturer Jasun Envirocare prides itself in the levels of quality and service it offers. Jasun is the only air filter manufacturer that has the only UK based ISO16890 test facility.









## **Jasun Envirocare PLC**

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