

# Cleaner air for every step of your way



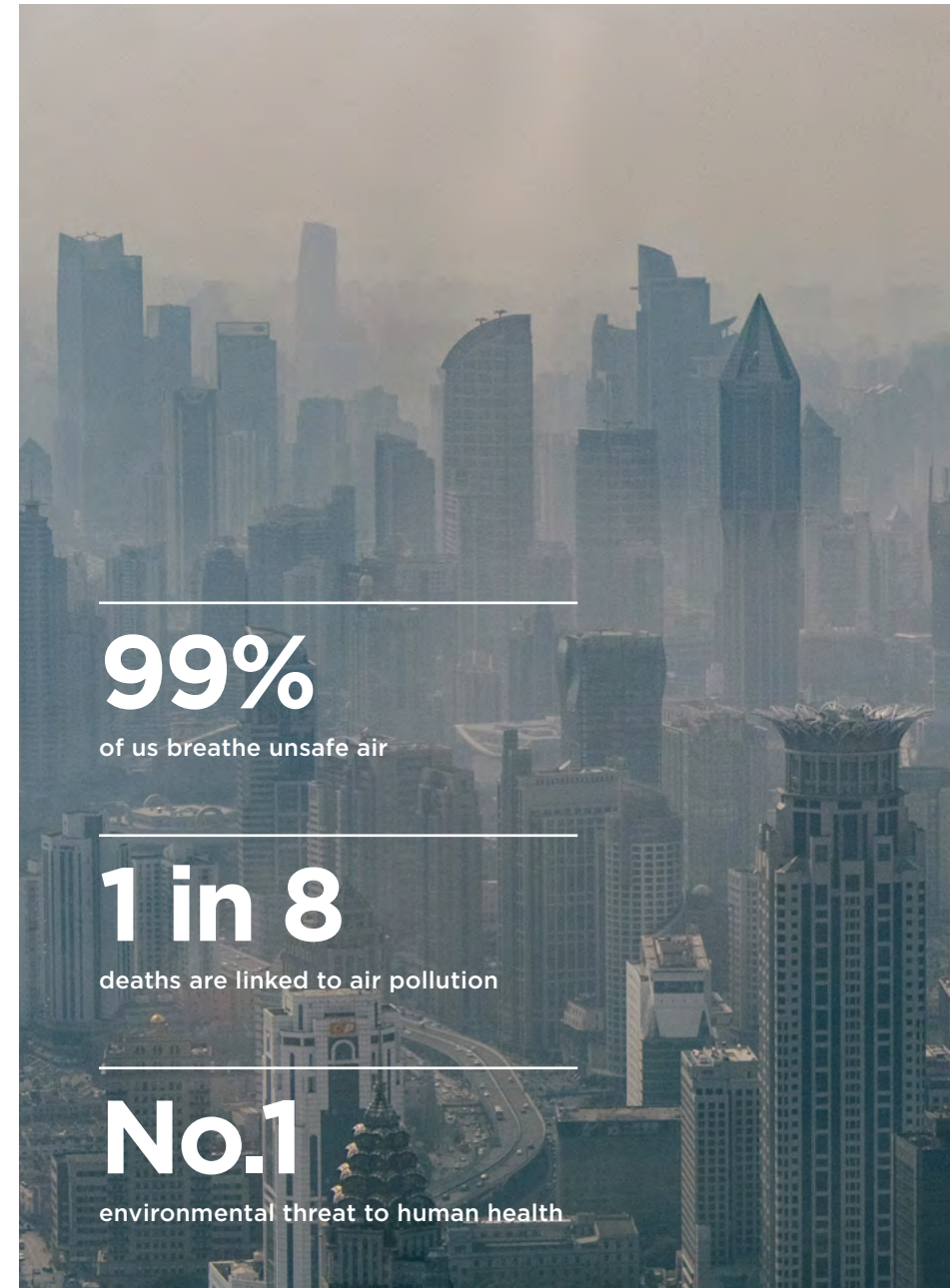
# A challenge that affects us all

Air pollution is a seemingly inescapable fact of life for the vast majority of the world's population. Every day, more than nine-in-ten of us breathe air that is damaging our health. Children, the elderly and those with existing health issues face the greatest impact, but no one is immune. Experts believe that air pollution may be damaging every organ in the human body.

## THE HEALTH EFFECTS OF AIR POLLUTION ACROSS YOUR LIFETIME



- Birth defects
- Low birth weight
- Autism
- Childhood asthma
- Cognitive decline
- Infertility
- Depression
- COPD
- Brain disease
- Heart damage
- Stroke
- Diabetes
- Various cancers
- Alzheimer's
- Dementia
- Osteoporosis



**99%**

of us breathe unsafe air

**1 in 8**

deaths are linked to air pollution

**No.1**

environmental threat to human health





MANN+HUMMEL has taken on the challenge of addressing this danger by offering solutions to help protect billions of people from air pollution worldwide.

MANN+HUMMEL Public Air Solutions capture airborne contaminants and improve the air quality of your every breath – inside, outside, or anywhere in between.

---



# Clean air solutions for your every breath

You may not see them, but our filtration solutions are likely to be all around you as you go about your daily life – cleaning the air and helping to preserve your health. Click the markers to explore how our filtration solutions help keep you safer.





# Safer air indoors and outdoors

---



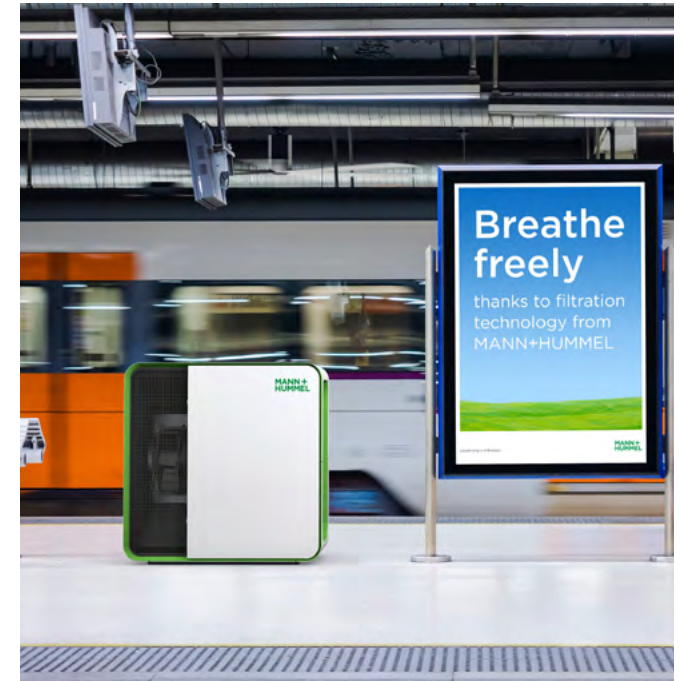
## MODULAR, STATIONARY FILTER CUBES FOR POLLUTION BLACKSPOTS

Air cleaning in critical areas with high fine dust and NO<sub>2</sub> concentrations, such as road junctions, transportation hubs, corporate campuses and playgrounds near busy streets.



## FILTER GRIDS FOR INTEGRATION WITH EXISTING INFRASTRUCTURE

Customizable air cleaners integrated into existing infrastructure like bus stop shelters, billboards and information displays at train stations, airports and exhibition halls, etc.



## LEAN BUT HIGHLY EFFICIENT FILTER SQUARES FOR HEAVILY-POPULATED AREAS

Stand-alone air cleaning solutions for underground stations, shopping malls or food courts with confined space conditions, and the highest design and functional requirements.

# Filter Cubes

## Breathe filtered air outside

---

Filter Cubes clean the outside air at traffic blackspots - reducing the harmful impact of air pollution on pedestrians, road users and local residents.

A modular design allows for rapid installation, and allows the Filter Cube system to be easily tailored to different locations and environments. A low pressure drop means that Filter Cubes offer maximum performance with minimal energy use.

Air pollution is highest closest to the ground. That's why children often face higher concentrations of harmful pollutants than adults.



---

**17,625** m<sup>3</sup>/h

Every hour, one Filter Cube III can purify the volume of air needed to fill around six olympic-sized swimming pools.

---

**80%**

Filter Cubes bind more than 80% of particulate matter and NO<sub>2</sub> from the incoming air.





### DUAL PROTECTION

At the heart of every Filter Cube lies a newly-developed combi filter, which features both particle filtration and activated carbon layers. These dual layers deliver protection from microscopic dust particles (PM2.5 and PM10) and gaseous contaminants, such as nitrogen dioxide.

# Filter Grids

## Integrated air filtration in busy areas

---



**A discreet but effective solution, Filter Grids remove airborne particulates from spaces where people congregate or pass through.**

With an adaptable format, Filter Grids can be easily Integrated into existing infrastructure - such as information displays, billboards or bus shelters. This allows an effective air filtration solution to be added to busy areas without causing an obstruction, taking up additional space, or creating a trip hazard.



## A HEALTHIER SPACE TO WAIT

Bus and other mass-transit stops are typically sited on major link roads. As traffic stops and starts, waiting passengers are exposed to high levels of exhaust fumes, as well as particles from tire and brake abrasion.

These contaminants can become trapped within the structure of the waiting area itself - further increasing the risk for those waiting.

Filter Grids capture particulate matter, nitrogen dioxide and other harmful contaminants to transform waiting areas from hazardous to healthy.





# Filter Squares

## Air filtration in semi-closed spaces

---

**Filter Squares provide effective air cleaning in semi-closed and wide-enclosed spaces – where trapped airborne pollutants pose a threat to human health.**

Filter Squares have a range of media options to deliver the most appropriate defense to each space. Particle filters for areas where PM is the primary danger. Combi-filters where odors such as smoke, waste or urine are causing discomfort. And our PreciousComfort filter media where free allergens and microbial growth are an issue too.

This makes Filter Squares suitable for a wide range of spaces – including shopping malls, food courts, large waiting areas (such as airports), and subway stations.



### QUIET OPERATION

In enclosed places such as subway platforms and shopping malls, sounds can reverberate off the walls and ceilings. Filter Square features a low-noise fan and a sound-optimized design to minimize the acoustic output of the device.





## SIMPLY FLEXIBLE

A modular design and flexible architecture mean Filter Squares can be adapted to the needs of your environment. That can be one device, or several units stacked together - depending on the size and flow conditions of the area to be cleaned.

Our experts will perform simulations and advise you on the number and arrangement of Filter Squares needed.





# We clean the air, anywhere. Filtration throughout your daily life

---



## HVAC AIR FILTERS

Air conditioning filters help create comfortable, healthy indoor environments. Our filters do so with the lowest possible energy demand and also protect the other HVAC components from fouling too.



## HEPA FILTERS

In some applications, a failed filter can pose a risk to life. Our high efficiency EPA, HEPA and ULPA filters provide the highest standards of reliability, so scientists, surgeons and other specialists can do what they do best.



### **MOBILE AIR PURIFIERS**

The OurAir range of air purifiers bring cleaner air to anywhere with a power supply - simply plug in and create a safer space. These flexible units capture a full range of contaminants, including viruses, pollen, odors and harmful gases.



### **OPERATING ROOM SYSTEMS**

Our operating theater systems wash clean air down over the patient to reduce the risk of post-operative infection. And they do this without creating a draft, so the surgical team can concentrate on the job in hand.



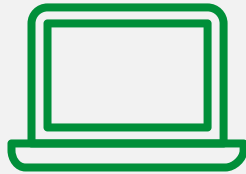
### **INDUSTRIAL AIR CLEANERS**

Industrial workshops can be busy, hazardous places. Our ScandMist range of industrial air cleaners make these areas safer by capturing the coolant smokes, emulsions and mists created during the machining process.



# Take your first step towards healthier air

---



**VISIT THE MANN+HUMMEL  
AIR FILTRATION WEBSITE**



**CONTACT US TO DISCUSS  
YOUR REQUIREMENTS**

