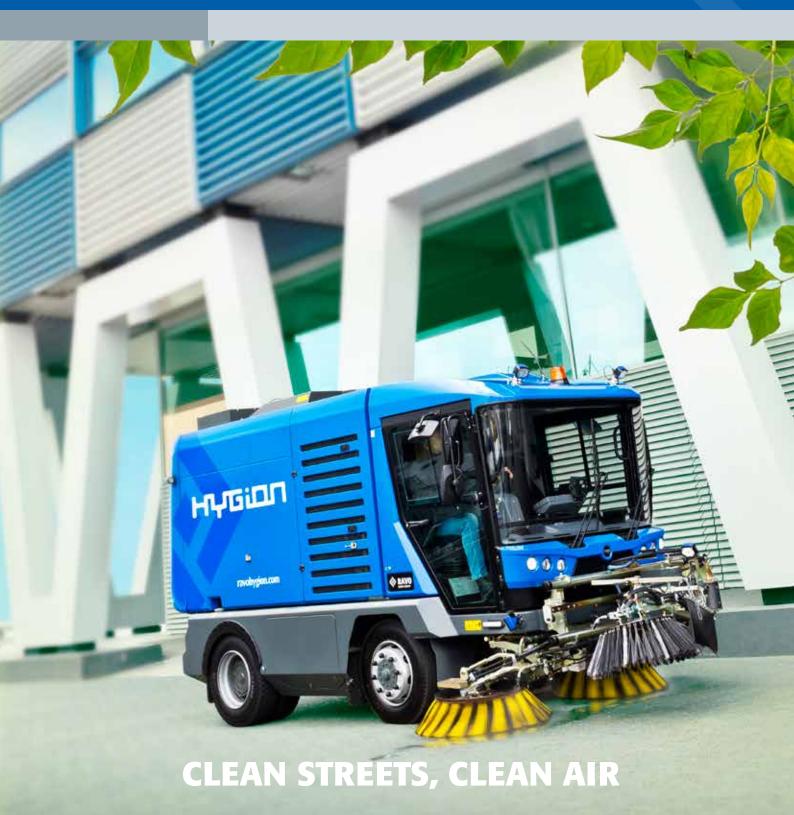


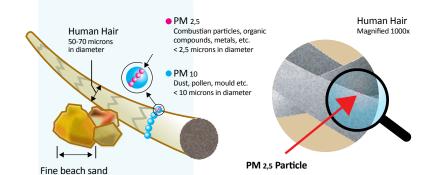
# Hygion



## **FINE DUST**

Particle matter pollution, better known as fine dust has become a growing issue for cities worldwide. More and more frequent cities have to take drastic measurements such as partial shut downs because the pollution is too high. But before talking about solutions, let's look into what fine dust actually is.

Fine dust is not visible to the human eye and exists out of Particulate Matters (PM). It can come in almost any shape or size, and can be solid particles or liquid droplets.



### **HOW IT FIRST STARTED**

Being aware of the growing fine dust issues cities are facing worldwide, and being a pioneer in the sweeping branch, RAVO takes responsibility in reducing fine dust pollution. Meeting high fuel emission standards is one solution but we wanted to take it a step further by focussing on cleaning the air from fine dust. RAVO teamed up with ENS Europe, an authority in this field and found a way to utilize ENS' unique and patented filtering system. This is a complete different system than anything which was ever available before since it is based on positive ionisation. Together RAVO and ENS have further developed this technology to integrate it in the RAVO 5 iSeries. Several years later we are proud to propose the first and only sweeper with this patented technology: THE RAVO HYGiON

Particles can be divided into two major groups which differ in many ways. The coarse particles or PM10 (includes smoke, dirt and dust from factories, farming, and roads, as well as mold, spores and pollen) are created through the crushing and grinding of rocks and soil, and then blown by wind.

The fine particles or PM2.5 (includes toxic organic compounds and heavy metals) are created through driving automobiles, burning plants (brush fires and forest fires or yard waste), smelting (purifying) and processing metals.

The picture on the left gives a better idea of the size of these particles. These small particles can easily enter our body and bloodstream which can cause severe health issues. Communities, companies and citizens worldwide have taken initiatives to help solve the fine dust matter. RAVO is one of these companies.



90 microns in diameter

# Captures PM10 AND PM2.5\* \* TÜV Certified

# THE RAVO HYGION WITH SAIGA PARTICLE SYSTEM

An important step towards a cleaner sky and safer city environment: The RAVO HYGiON has all the advantages of the 5 iSeries with an extra benefit; It is equipped with the SAIGA Particle system. With this system the sweeping machine does not only sweep the streets clean it also captures the fine dust from the airstream out of the air.

The SAIGA Particle system brings electrostatically charged ions into the exit airflow of the sweeper.



By doing this dust particles are electrically charged. This attracts them to the opposite charged collector and binds them together. These particles are then collected on the frame and are transformed into larger pieces of dust. These will then clog to the system until cleaned.

This cleaning system has been designed in such a way that there is no need for any physical contact between the operator and the machine while cleaning the system. In this way it meets all safety standard and avoids the shaking of conventional fabric filters which can be found in other systems. Another great advantage is that this system does not effect the sweeping performance in anyway.

#### More information?

Contact your local dealer or visit our website: www.ravohygion.com







## **THE SAIGA**

RAVO has named the particle filtration system after the Saiga, an endangered antelope which lives in the steppes in Russia and Kazakhstan. This animal is recognizable by an over-sized, flexible nose structure, which helps it to filter out fine dust which is kicked up by the herd during summer migration. The Saiga is treathened by extinction and RAVO would like to help the Saiga. We do this by giving a donation for every RAVO HYGION sold.



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