

HOSPITAL REMOVES FUME AND PARTICLES DUE TO FOSSIL FUEL WITH THE HELP OF UNIQUE 2-IN-1 AIR FILTER

Fine particles along with independent VOCs (especially fume generated from diesel) were causing critical issues in the hospital's patient care areas and laboratories. Using Camfil's molecular air filters, the reputable hospital was able to remove fine dust, gases, odors, and fumes from the indoor environment.

THE PROBLEM

A year back, the technical service department at Deventer hospital received complaints several times a year about unwanted diesel odors in different parts of the hospital building. Headaches were a key problem among the laboratory staff.

In operating rooms, the problem was significant due to the air being circulated directly from the exhaust vent onto the operating table. Despite sufficient filtration of particulate matter, harmful gases were entering the hospital building through the air conditioning system. Hospital's management technician, Tim Schrijver secured the help and expertise of Dennis Bosscha from the installation firm Kropman Installatietechniek B.V. and Laurens Wolbers from Camfil.

The key factor in consideration was that solving the problem from the root level was impossible since there was not a way to control traffic and diesel fumes coming from outside. Also, with many neighboring buildings under construction or repair, dust and fumes coming from different external sources was unavoidable. The periodic testing of an emergency power generator produced diesel fumes which posed additional challenges.

"During scheduled maintenance, the emergency unit runs all day, and that triggers the first set of complaints." - Tim Schrijver, Deventer Hospital



CAMFIL CITY FLO-XL, UNIQUE TWO-IN-ONE AIR FILTER REMOVES GASES, ODORS, AND FINE DUST



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THE SOLUTION

Capturing gases and molecules is possible by using activated carbon in the air conditioning system. Activated carbon is at the heart of all successful molecular filtration solutions. Camfil has a selection of proven activated carbons to target as wide a range of odors, irritants, toxic and corrosive gases as possible.

In this case, however, there is no space in the system to place an air filter with carbon media and the carbon filters entail extra resistance that is often not calculated with the fans. So, the ideal solution is a two-in-one filter installation at sections where the fine dust and fumes are the biggest concerns. This air filtration will save heavy investment in the air conditioning/ventilation system and will remove harmful particulate matter from the indoor environment. Camfil's City-Flo XL two-in-one filter doesn't involve extra resistance so there isn't load on the fan unit of the air conditioning system.

A Big Win for the Hospital!

Since the installation of Cityflo filters, there have been no complaints or concerns.

The two-in-one air filters, called City-Flo, are currently used in three air conditioning cabinets in different departments of the hospital building. After the installation, the technical department at Deventer hospital has received no complaints or concerns related to problems with dust, fumes, and odors.

Hospitals rely heavily on clean indoor air to ensure both the health of the patients and staff are protected. With Camfil, this is achievable as the solutions add an extra layer of protection to fight harmful particles that can cause problems to health and safety in the hospital environment.

City-Flo XL Product Information

• "Two-in-one" filtration solution – particulate and molecular

CASE **STUDY**

Healthcare

- Low initial pressure drop
- Rapid Adsorption Dynamics (RAD)
- Ideal for filtering low concentration of most external and internal source pollutants
- Molded, rigid and aerodynamically shaped plastic frame
- Can be used to upgrade existing installations
- ePM1 60% acc. ISO 16890







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