



**SECTOR:** Clinics  
**CLIENT:** Sermig  
**LOCATION:** Italy  
**DATE:** January 2023

# CAMFIL AT THE SIDE OF THOSE WHO HELP

## IMPROVING AIR QUALITY IN SERMIG PRACTICES WITH AIR PURIFIERS DONATED BY CAMFIL

**Camfil Caring is a global Camfil program that demonstrates how much we care for the air we breathe and environmental issues through sustainability and corporate social responsibility activities involving employees across all locations and geographies where we operate.**

As part of the programme, Camfil branches organise a Caring Week. For an entire week, we promote community awareness events and internal improvement measures that help create a sustainable world for future generations.

### CARING WEEK 2022

For Caring Week 2022, we have chosen to donate 3 City M air purifiers to Sermig humanitarian organisation, specifically in three of their clinics:

- Dental Practice
- Psychology Clinic Studio
- Infirmary Room




These rooms were selected among others because they are among the busiest. Therefore, the need for air purification is greater than in other environments.

*The Sermig Association-Youth Missionary Service- is a non-profit organisation founded in Turin in 1964 from a vision of married couple Ernesto Olivero and Maria Cerrato: to fight hunger in the world through works of justice, promote development and practice solidarity with the most poor.*





*Convinced that only the sharing of resources, justice and dialogue lead to peace, Olivero has carried out around 3,700 humanitarian actions with Sermig in 155 countries through studies and projects aimed to produce self-development and basic aid for populations in need.*



## ADVANTAGES OF CITY M PURIFIER

-  **H14 HEPA filter with 99,995% filtration efficiency**
-  **Plug & play installation**
-  **Molecular filtration stage for VOC and odor removal**



-  **Healthier & more comfortable environment**
-  **Removal of viruses, bacteria and particles**
-  **Allergy reduction – ECARF certification**
-  **Reduced energy consumption**

Air Image sensore

## AIR QUALITY MEASUREMENTS

To demonstrate the effectiveness of the City M air purification systems, Camfil conducted measurements using the Air Image monitoring system.

Initially the measurements were carried out in the three rooms without medical personnel or patients, who only later entered and started their medical activities. At the end of the visits/treatments, the City M air purifiers were put into operation, without interrupting the measurements.

*"We are very happy with the City M purifiers! Just a few hours after they're turned on, you actually perceive a different atmosphere inside our premises."*

**– ANDREA ZAMPOLLO, HEAD OF THE SERMIG MEDICAL CENTER OUTPATIENT CLINIC**



Presentation of Measurement Results

## PARTICLE ANALYSIS

### 1. Dental Office

In the dental office, there was a reduction of PM2.5 ( $\mu\text{g}/\text{m}^3$ ) of about 65%. With the purifier on, the particulate level remained low even during the dental visit, despite the use of dynamic tools such as burs and turbines which are capable of generating aerosols that can carry potentially pathogenic agents.



and there were no peaks like the one recorded during the visit with the purifier turned off.



### 3. Hospital Room

In the hospital, the reduction of PM2.5 ( $\mu\text{g}/\text{m}^3$ ) was approximately 80%. The graph shows how the opening of the window caused a sudden and significant rise in particulate levels, with a strong impact on air quality. However, the air purifier made it possible, in just a few minutes, to reduce the particle concentration recorded following the opening of the window.



### 2. Psychology Clinic

In the psychology office, the reduction in PM2.5 ( $\mu\text{g}/\text{m}^3$ ) was approximately 30%. The lower impact of the City M in this room is presumably due to the fact that the volume of this room is greater than the other two, so it would have been necessary to wait longer to appreciate a more significant particle reduction. However, if we consider the average values of PM2.5, it will be noted that during the visit with the purifier on, the particulate matter reduced about 30%

## FINAL CONSIDERATIONS

The particle measurements carried out show a reduction from 30 to 80% of the PM2.5 particulate.

The decrease in particulate determines the diminishing of the microbiological colonies. The airborne microorganisms are in fact adhered to and transported by the particulate, which acts as a vector for the smallest particles.

From the above, it can be seen that, thanks to the use of the plug & play City M purification system, it is possible to obtain a significant reduction in the particulate present, and thus obtain improved health and well-being of patients and operators.