



Air quality where we live and work is fundamental for our well-being, since we spend most of our life indoors. In-depth clinical studies have proven that indoor air can be **up to 100 times more polluted than outdoor air**. The effects of unhealthy air inside buildings may vary from eye and throat irritations, asthma, dermatitis, cough, concentration difficulties, to very serious pathologies.

In particular, there is something called **Sick Building Syndrome** and **Building-Related Illness**

- The term Sick Building Syndrome (SBS) was created to describe those buildings whose occupants suffer from health problems and various issues only when they are inside said buildings. In such cases, people recover their good health once they leave the building.
- With Building-Related Illness, instead, and contrary to what happens with SBS, the symptoms of illness and malaise do not disappear once an individual leaves the building and, with time, can turn into more severe pathologies, such as Legionnaires' disease, Pontiac Fever, bronchitis, and asthma.

There are many sources of indoors pollution: the most common one is linked to air conditioning systems; with time, and lacking appropriate maintenance, air conditioning systems may become the worst enemy for our health, because of the gathering of dust and debris inside the ducts, which combine with air humidity to create the ideal habitat for fungi, bacteria, viruses and moulds, all dangerous micro-organisms that are breathed in by the people who live and work inside the buildings.

Air conditioning systems comprise various mechanical parts and several metres of complex ducts and all, with time, collect dust and debris. Air conditioning systems that are not cleaned and sanitised on a regular basis are the perfect breeding ground for biological contaminants, thanks to constant temperature, humidity and dirt.

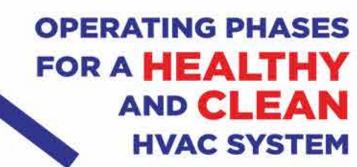
Contaminants inside the ducts may vary from dust and dirt to bacteria fungi and moulds. Moreover, dirty air conditioning systems, besides seriously damaging one's health, may also cause the blackening of walls, the dissemination of bad smells and the deterioration of materials. All this may lead to allergic or asthmatic reactions in sensitive subjects, and to other health issues of varying severity.

Prevention adequate controls and corrective actions are necessary in order to prevent such systems from becoming a vehicle for pollution; an effective maintenance of filters, regular cleaning of air processing units and of all terminals, together with duct disinfection help keep bacterial contamination under control and limit the risk of pollution.

> Regular controls and laboratory analyses of both system and air are useful because they provide the parameters for the correct assessment of the health status of the system and the building and, if necessary, for the corrective actions that must be carried out. In any case, after a long time in operation, the system requires targeted sanitation actions to re-establish optimal hygienic conditions.

> > A clean air conditioning system means: improved ventilation quality elimination of biological contaminants, reduction of maintenance costs, better air quality, healthy environment and reduction of health risks for the occupants.

In many countries, including the United States and Europe, indoor air quality control regulations have already been implemented and air conditioning system sanitation activities are now carried out regularly as part of the normal ordinary maintenance schedule.



DUCT

VIDEO

INSPECTION

BACTERIOLOGICAL

ANALYSIS







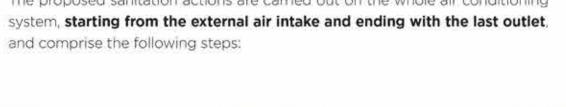
THE SYSTEM

IS A SOURCE

OF POLLUTION

Air quality is important in all buildings that have a canalised air conditioning system: private buildings, schools and public buildings, sports facilities, clinics and hospitals, vehicles (trains, underground trains, airplanes, ships and yachts), shopping malls.

The proposed sanitation actions are carried out on the whole air conditioning





AND ECONOMIC REPORT: PROPOSED ACTIONS AND COSTS

EXECUTION OF THE FOLLOWING TREATMENTS:

- documents 1. DISINFECTION • cd-rom
- 2. SANITATION pictures delivery
- 3. COATING



REGULAR SCHEDULE

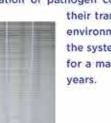
MAINTENANCE AND CONTROL

SANITATION REPORT

The third phase is the COATING treat-

ment, which consists in the distribution of a long-acting fungicide and bacteriostatic agent inside the ducts and the AHUs. The effectiveness of the product shall prevent the proliferation of pathogen colonies and

their transfer to the environment when the system is in use, for a maximum of 5





THE AIR QUALITY SPECIALIST

Montalba Indoor Air Quality is a leading Italian company in the field of design. production and maintenance of climatisation systems that focuses on the search for innovative solutions; in particular, the Company is specialised in the sanitation of air conditioning systems, protecting the environment and indoor air quality.

Montalba was the first company in Italy to offer climatisation system cleaning services, in 1995, and since then it has been firmly rooted in this field; Montalba developed the technology for a system that can clean any kind of building, from offices, to schools, shopping malls and nuclear plants, without forgetting houses and residential high-rises, and has, indeed, serviced all kinds of systems.

Our service starts with an analysis of the situation to date and ends with the proposal for the best solution to any issues, be they connected to the design and maintenance of the systems or to indoor air quality. Last, but not least, our sanitation service is the only service that comes with a 5-year warranty, with regular checks aimed at maintaining the parameters within the correct range all through the warranty period.

Our company is a dynamic firm that is constantly growing and developing, thanks to its deep roots: due to its knowledge of the most complex building techniques, of local know-how and of the most innovative sanitation solutions, Montalba can make its vast experience in air conditioning system requalification available to its customers, to improve the quality of life and of the environment.





The first phase of any sanitation treatment is the DISINFEC-TION of the system from pollutant such as bacteria, fungi and

Disinfection is carried out with a sterilising and sporicide agent that is nebulised in the air processing units, the ducts and the external air intakes. The product is distributed by video controlled robots or special nebulisers and then left to dry thanks to the air flow generated by our extraction fans.

At the end of this treatment the bacteriological status of the air conditioning system shall be clean, at least temporarily, and this makes it possible to carry out the other phases of the sanitation treatment.







section of the system is completely isolated and excluded from the rest of the system, so that it can be cleaned without creating problems in areas not involved in the sanitation process. The external air

intakes, the diffusers and room air outlets are dismantled and then cleaning proper can start, with the help of video controlled robots equipped with brushes or pneumatic whips. Besides the robots, cleaning is carried out also with the help of suction, provided by the extraction fan that captures anything that is removed in its filters. The extraction fans are designed to be used also in hospitals, as they provide three-step filtration with the last step providing absolute filtration. By eliminating the dirt, this treatment effectively removes the breeding ground of micro-organisms.





SOME OF OUR CUSTOMERS:

Municipality of Milan

Court of Milan

Banca Popolare di Milano

Banca del Monte di Parma

Ferrari SpA

Citroën Italia SpA

Manulli Rubber Industries

CCR Research Centre

Reggio Calabria Bone Marrow Transplant Centre

University of Milan

Enea

Bayer SpA

Nestlé

Compass

Siram SpA

Geas Piscine

Hospitals and Local Health Units (Fatebene Fratelli Hospital, Circolo Hospital, S. Carlo Clinic)



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