### CASE STUDY

# FG Indoor Air Quality

Air Filtration



# FG IAQ Provides Valuable Filtration Solution for Medical Centre

### INITIAL SITUATION

Indoor Air Quality (IAQ) is an important component in health and safety for this large fitness center affiliated with a cardiac surgery hospital in Quebec, CA. With more than 5000 members and over 80 employees, the fitness centre helps patients to improve their habits in order to maintain optimal health and prevent the onset of cardiovascular disease.

## **CHALLENGE**

Healthcare applications are among the most

challenging when determining air filtration solutions. At risk is the health of patients and staff, especially when there are physical activities that produce higher levels of airborne dust.

The goal of the fitness center was to improve Indoor Air Quality through a review and rationalization of the type and quantity of filters currently in use.

### SOLUTION STATEMENT

FG IAQ's team of NAFA Certified Air Filter Specialists (CAFS) performed an on-site survey of the different air handling units (AHU's), checking location, orientation, room usage, dust analysis and more. One of the findings revealed that most of the units where two stage filtration units.

The first filtration stage was using standard capacity MERV8 pleated filters. The second stage was more complex, using several types of filters i.e. Pocket/Rigid/Geopleat filters and ASHREA cartridges. Factors studied included initial pressure drop, dust holding capacity, filtration surface, cost, life expectancy and MERV rating.

The results of the study concluded that a standardization towards the FG IAQ Geopleat filter

would be beneficial in several ways:

- Cost reduction of total filters being used annually
- Rationalization of type of filters
- Improvement of down-time
- Reduction of filter disposal fees
- Improved air quality
- Reduced maintenance labour costs
- Energy savings due to lower initial pressure drop



The medical fitness centre staff and patients noticed the immediate improvement in indoor air quality.



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