



**KRISTALNA
IDEJA**

Innovation is life



CASE STUDY

The sophisticated, smart *iTherapy 1* device reduces cigarette smoke pollution.

- ✓ A fully automated device improves the indoor climate conditions of the coffee bar.
- ✓ Thanks to its automation, it has reduced maintenance costs.
- ✓ Neutralizes the unpleasant smell of cigarette smoke.

ABSTRACT

The harmfulness of cigarette smoking is a well-known fact. Yet many surveys have shown that the number of smokers is on the rise, especially among young people. The air in coffee bars is loaded with smoke and is of unhealthy quality. It is therefore important that existing facilities introduce the necessary measures to ensure a healthy and comfortable environment for their employees and customers. In order for coffee bars to remain competitive on the market, they must ensure safe air quality for both smokers and non-smokers.

THE CHALLENGE

As a catering facility that also serves for smoking, it is fully committed to providing safe air quality. For this purpose, the smart air purifier *iTherapy 1* is installed in the space. The space of the coffee bar has a built-in ventilation system that works on the principle of intentional removal of a certain amount of air through the designed openings. In this way the air distribution is regulated. The ventilation device in the room generally works continuously. However, despite the ventilation system, the long-term effects of indoor smoking can be very difficult to mitigate resulting in poor air quality.



iTherapy 1 is easy to install in any space.

Impact of air purifier *iTherapy 1*

- ✓ **concentration of aerosol particles PM_{2.5} reduced by 37%, PM₁₀ by 34%.**
- ✓ **concentration of TVOC particles reduced by 55%**
- ✓ **air quality improved by 37%**

An affordable and effective solution to this growing problem is the installation of an ***iTherapy 1*** air purifier. The operation of a smart device reduces harmful and unpleasant cigarette smoke. The device simultaneously detects, purifies and modifies the air inside the coffee bar. It improves air quality and allows all guests to feel comfortable.

THE SOLUTION

To improve indoor air quality, the ***iTherapy 1*** air purifier is installed in the coffee bar. This innovative solution for cigarette smoke reduction has the latest technology. ***iTherapy 1*** uses the iTHE100-patented universal filter that eliminates cigarette smoke indoors. The average cigarette smoke contains mainly aerosol particles PM₁₀ and PM_{2.5} as well as TVOC particles. Aerosol particles are inhaled together with the air and penetrate deep into the lungs. iTHE100 filters these aerosol particles by the adsorption process. When aerosol particles reach the filter, they stick to its specific surface by the adsorption process. The analysis of the measurement results of the total air quality and the air quality index AQI revealed the high influence of the smart air purifier ***iTherapy 1*** on the elimination of pollution obtained from cigarette smoke. The concentration of aerosol particles PM_{2.5} was reduced by 37%, PM₁₀ by 34%. The concentration of volatile organic compounds TVOC was reduced by 55% and the air quality in the room was improved by 37%.

THE RESULTS

After installing the ***iTherapy 1*** air purifier, the results of our test showed a significant reduction in pollution derived from cigarette smoke.

The concentration values of the measured average parameters: aerosol particles (PM_{2.5}, PM₁₀, µg), volatile organic compounds (TVOC, mg) are significantly lower. The sophisticated, smart air purifier has ***improved air quality by 2.7 times***, ie improved the climatic conditions in the room. This has led to the elimination of unpleasant cigarette smoke and at the same time raised the awareness of customers about the

**iTherapy improving
quality of life**

Kristalna ideja d.o.o. , Put Duilova 10, 21000 Split, CROATIA
contact : 00385(0)21772805 , www.itherapy-shop.com