

**Akademiska Hus**

A Mellifiq reference project



# Akademiska Hus reduces cooking odors with ozone

**No more odors are spread  
in the surrounding  
neighborhood**

**MELLIFIQ**

# Akademiska Hus, Sweden

*Akademiska Hus is a Swedish state-owned real estate company that builds and manages properties that are rented primarily by universities and colleges. With a property value of over USD 6 billion and a turnover of USD 500 million, Akademiska Hus is one of Sweden's largest real estate companies. The business is divided into six regions with headquarters in Gothenburg. The properties are located around the country where around 300,000 people study, research and work every day.*

*Akademiska Hus develops and manages the premises with great concern for the environment. Since December 2004, the company has been certified according to ISO 14001 and is at the forefront of developing and using technology with high environmental profile. An example of this is energy efficiency improvements and the development of alternative energy production. For each property, Akademiska Hus is looking for the most energy efficient solution. They also work to prevent the pollution that can occur in the business.*

## Facts

Name:	Akademiska Hus
Location:	Sweden
Industry:	Real estate company
Purpose:	Air purification in commercial kitchen
Flow:	13,000 m <sup>3</sup> /h

## Solution:

### **Ozonetech RENA high-performance ozone system**

Dimensions (HxWxD):	400 x 400 x 200 mm
Input power:	0.5 kW
Noise level:	49 dB

## The problem

Akademiska Hus property portfolio contains many restaurants used by those who study, research and work. The fat and cooking odors that arise get stuck in the ducts, which leads to an increased fire risk and unwanted

spread of odors in the surroundings. In its quest to prevent grese-related problems and enable energy efficiency, the need arose to review the purification of the exhaust air in the ventilation ducts.

*“To overcome the problem of spreading cooking odors was a challenge for us, and we sought a quick and effective solution. The installation was fast and did not interfere with the work in the kitchen. The fire risk was previously handled manually by chimney sweepers. The recurring flushing cost a lot of money each year and in addition to the environmental benefits, there was also a desire to reduce costs.”*

Restaurant manager

## The solution

In the discussions in the aftermath of an Ozone Academy seminars, a idea was born to use ozone-based purification of both the exhaust air and the duct channels. The purpose was to remove cooking odors and reduce the fire risk, which is one of the priority challenges for property owners who accommodate restaurants on their premises.

Ozone is an established purification method in industrial application and large commercial kitchens to reduce odors and increase fire safety. High-performance ozone generators by Ozonetech quickly eliminate grease and odor particles before they get to cause problems. After decomposition, only water vapor, some carbon dioxide and dust remain. When the risk of fire decreases, the stainless steel ducts can be replaced with ordinary black plates which are considerably cheaper.



*The restaurant that uses air purification to reduce the risk of odors and fire.*

## Evaluation

Today, Akademiska Hus has installed ozone-based air treatment in several properties with very good results. Ozone purification is a proven way of reducing costs, avoiding the spread of cooking odors and maintaining the capacity the ventilation is designed for. In addition, the treatment enables heat recovery.

The benefits of installing ozone treatment in restaurant kitchens are many and can save thousands of dollars a year. Once the equipment is installed and in operation, which takes a couple of days, the system is automatic and thus requires no operational personnel.

*“At Akademiska Hus we have for several years used Ozonotech’s high-performance ozone generators to treat the ducts with great results. We no longer spread disturbing cooking odors in our surroundings.”*

Restaurant manager



*Part of the restaurant interior.*

# About Mellifiq

Mellifiq is a multi-awarded environmental service company group, that has since the early nineties evolved into a world leading system and solution provider with multiple groundbreaking applications for industrial, municipal, and real estate clients. We supply cutting-edge technologies to manage the most sophisticated air, water, and energy challenges.

Mellifiq offers a complete range of air and water treatment technologies and solutions across multiple industries such as processing industry, energy sector, food and beverage, pharmaceutical, wastewater treatment and commercial real estate.

Mellifiq offers strong and renowned brands, such as Ozonotech, Nodora and Water Maid, and world-class engineering services combined an excellent track record of more than 40 years of innovation. We help our clients achieve the most efficient and sustainable solutions while creating the maximum value for their businesses.

With several business units across Europe, Mellifiq is headquartered in Stockholm where research and development, production, QA and certification all take place. Our unique technology and our extensive expertise have made us the Center of Excellence for the world's most complex projects, and a global player with installations on all six continents.

Everyday millions of people rely on our solutions for ventilation, disinfection, sanitation, and odor control. We are committed to raising the bar for the concept of clean and the industry standard for engineering, technical services and general contracting.

For additional information, visit our website at [www.mellifiq.com](http://www.mellifiq.com)

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