## Central Vacuum Cleaning System for Hotels



**Enabling Wellbeing** 

# Halton promotes he by providing good inc

Studies have shown that indoor air can be up to five times as polluted as outdoor air, causing harmful effects on people's health. Halton has risen to the challenge of improving indoor air quality by developing a unique central vacuum cleaning system in cooperation with the University of Tampere.

### The central vacuum cleaning system

Halton's central vacuum cleaning system (CVC) improves indoor air quality significantly by removing detrimental micro-dust from indoor spaces without circulating it back to the indoor air as traditional vacuum cleaners do. While improving customer comfort and satisfaction, the various benefits of Halton's CVC system contribute to employee satisfaction and performance as well.

### **Sustainability**

What makes a person choose a hotel over another? It is value. When it comes to choosing a hotel, sustainability is one of the key values influencing customer's decision making, satisfaction, and loyalty. This is because customers pay nowadays attention to environmentally friendly characteristics of hotels.

Halton's CVC is simply the best and most sustainable choice in a hotel environment when compared to any other vacuum cleaner. A lifecycle of a traditional vacuum cleaner is short. Throughout the full service-life of a hotel, many vacuum cleaners will eventually be replaced by newer units, generating a massive amount of waste. Halton's CVC system is designed to serve as long as the building itself. The system is not just promoting your hotel's sustainability, it is also increasing the value of the hotel property.

#### **System operation**

Every CVC system is designed together with the hotel operator, taking their needs into consideration. The hotel is divided into sections by the needed number of cleaners. Each section has its own module. One module serves multiple simultaneous users. CVC's central unit, which powers the entire system, is placed in the basement or AC room of the hotel. There are inlet valves (hose connection points) installed throughout the hotel. To minimize injuries, inlet valves are placed at a height that permits the user to reach them in an ergonomic position. When a cleaning hose is plugged into an inlet valve, the system starts to vacuum. Sensors control optimal vacuuming performance while minimizing electricity consumption. When the hose is unplugged, the central unit's motor stops.

### **Self-cleaning cycle**

CVC system's self-cleaning cycle activates after each session of vacuum cleaning. The meaning of this function is to air flush all the risers and main pipes of the system as it prevents pipes from clogging. In 30 minutes, an automatic filter cleaning activates. CVC vacuum unit makes a series of compressed air shocks on the filter, which removes most of the debris from the filter. This function extends the lifetime of the filter cartridge and reduces the need for maintenance.



## ealth and wellbeing loor air to hotels





Photo by courtesy of Scandic Hotels Group AB



### Marski by Scandic

The brand-new Marski by Scandic hotel opened its doors in the first week of June 2019. The completely refurbished hotel is located in the heart of Helsinki, Finland at Mannerheimintie 10. The hotel has 363 hotel rooms, a restaurant, a bar, and a café, as well as, space reserved for events and meetings. Marski by Scandic is part of Scandic's Signature Collection brand and it is the first of its kind in Finland.

Halton participated in Marski by Scandic project by building and installing a brand-new central vacuum cleaning system to the hotel, replacing an older Halton central vacuum cleaning system. The previous system had been operating since the year 1996 and was still providing reliable service but had to be removed out of the way during the hotel's refurbishment. There was no need to make an expensive upgrade since Halton was able to maintain the previous system's motors. Maintenance of the existing motors was an environmentally-friendly choice and it saved a considerable amount of money for the customer.

The new system includes 4 central vacuum units and 404 inlet valves enabling 24 simultaneous users at the time. Central vacuum units are SPLITtype vacuum units, where motors and electric control cabinets are situated in the AC room at the highest floor and filtration/dust collection units are situated in one room in the basement. All inlet valves are situated in strategic places all over the building: in each hotel room and corridors, reception area, meeting rooms, restaurants and of course, covering a Finnish sauna area as well.

When it comes to sustainable business, Scandic is one of the leading hotel businesses showing the way in the hotel sector. Sustainability is an integral part of Scandic's business. Scandic believes, just as we do here at Halton, that caring for people and the environment can both contribute to good business and a better society.

## Enabling wellbeing

People spend most of their time indoors. Our mission is to enable wellbeing by providing the best possible indoor environment with Halton's central vacuum cleaning system.

### 1 Removes detrimental micro-dust

Micro-dust can cause breathing problems and allergic reactions. Halton's CVC uses the most efficient method of removing detrimental micro-dust from indoor spaces. CVC doesn't circulate the dust back to the indoor air as traditional vacuum cleaners do. Instead, the dust is removed right at the source and transmitted via pipelines directly to a waste collector.

### 2 Results in fresh and odourless air

The air is fresh and odourless after vacuuming with CVC as it removes even the tiniest particles of dust and dirt efficiently and does not cause any odours like regular vacuum cleaners. Providing fresh and odourless air is not just for the sake of better customer comfort but also for the wellbeing of the staff of the hotel.

### **3** Recommended by Finnish Allergy Association

The health impact of CVC has been studied at the University Hospital of Helsinki, Finland. Based on the results, the Finnish Allergy Association recommends the use of CVC. According to the study, when used regularly, CVC achieves indoor air that is as clean as outdoor air.

### 4 Specialises in ergonomic cleaning

Cleaning tasks require bending, reaching, pushing, carrying and lifting. Therefore, workers in the cleaning industry have one of the highest injury rates. Vacuuming with CVC prevents injuries by being the fastest vacuum cleaner to use without compromising on good working ergonomics.

### 5 Makes vacuuming fast, easy and comfortable

Vacuuming with CVC is fast, easy and comfortable, as it does not include any portable units other than a lightweight hose. Connecting the hose to the system is easy and fast: inlet valves are situated at a hand's reach, allowing the user to reach them in an ergonomic position.

### 6 Operates silently

Vacuuming with CVC makes hardly any noise as the central unit is situated in the basement or AC room of the hotel. Hotels that use CVC as their primary vacuum cleaner are reducing noises caused by cleaning significantly. Rooms, corridors and service areas can be cleaned in the daytime without disturbing hotel guests.









### Financial benefits

Halton's CVC delivers cost savings by reducing work absences caused by allergies, increasing productivity at work, and guaranteeing long service life for the system.

### 1 Reduces absences at work

Cleaning with CVC is healthier for personnel, as the system does not create dust-raising swirls filled with hazardous micro-dust. CVC helps in preventing absences due to allergies and other irritation reactions at work by providing the best possible indoor air.

### 2 Increases productivity

Unlike any portable vacuum cleaner, CVC has only the hose to carry around, so it makes moving around easier and less demanding. This increases productivity, making cleaning up to 55% faster than with traditional vacuum cleaners.

### 3 Prevents fumiture and surfaces from wearing

The fact that CVC has only the hose to carry around while vacuuming does not only make cleaning easy, it also prevents delicate surfaces and furniture of wearing.

### 4 Saves energy

According to our calculations, using CVC instead of traditional vacuum cleaners lead to substantial energy savings. The central unit adapts its power consumption based on actual demand – and yet it is much more efficient with its suction performance compared to traditional vacuum cleaners.

### 5 Saves space

The central unit of CVC system is installed in a dedicated space – typically the basement, or AC room. This can free space for one or more hotel rooms as storage space for vacuum cleaner units at hotel room floors is no longer needed. Each extra hotel room means more revenues.

### 6 Serves as long as the hotel building

The central unit is designed to serve as long as the building itself, up to 25-30 years. Usually, no replacements are needed at all during that time. CVC requires only minimal maintenance during its lifetime.



## At your service

### Halton emphasizes tailoring, which means that solutions are adapted to each customer's specific needs.

Halton has completed over 2,500 central vacuum cleaning system installations with great customer satisfaction. We design the central vacuum cleaning system in collaboration with the customer, taking their practices for cleaning, as well as, the entire life-cycle of the building into consideration. Halton supplies solutions not only for new-builds but also for refurbishments. We can deliver the materials as turnkey installations and carry out all system function tests and commissioning.

### We keep providing our customers with all the support they need, from maintenance to spare parts.

During commissioning, we train the customer on how to use and maintain the central vacuum cleaning system. After the commissioning, we will keep providing all the support our customer may need, including servicing and maintaining the system and its components. The continuous product development of the CVC system secures that we are always able to offer better, more modern, more durable and more affordable products. All the systems we deliver come with a 24-month warranty.



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### About us

### **Halton Group**

Halton Group specializes in indoor environment solutions, ranging from public and commercial buildings to foodservice facilities. Founded in Finland in 1969, Halton operates today in over 35 countries around the world, with annual sales of €220 million and over 1600 employees. The company has production facilities in Brazil, Canada, China, France, Finland, Germany, Malaysia, United Kingdom, and the USA.

