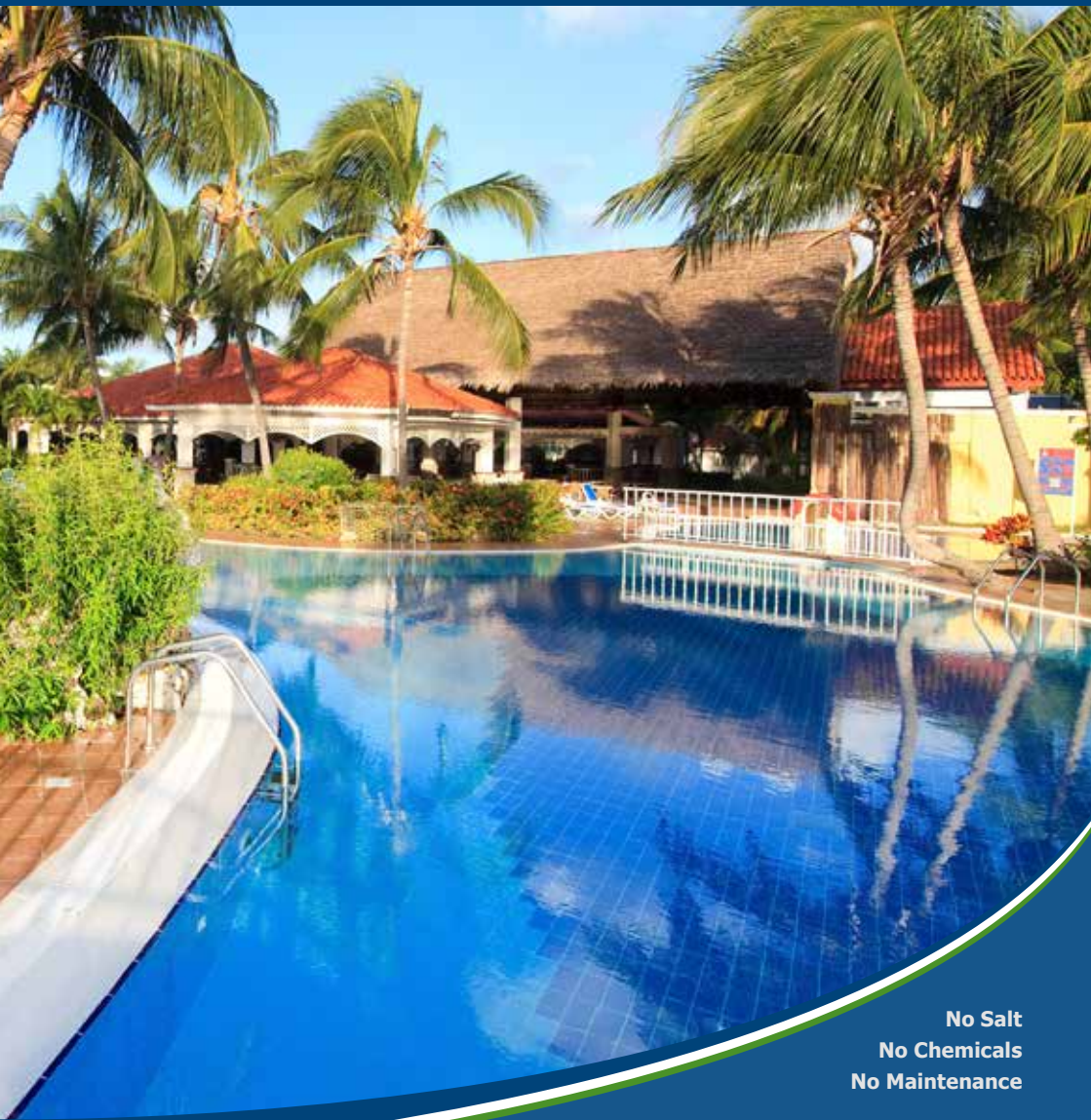


Vulcan

The Electronic Anti-Scale System For Hospitality Applications



**No Salt
No Chemicals
No Maintenance**

**German Technology
Absolutely Magnetism-Free**



Vulcan - The alternative to water softeners



The hospitality industry goes through a large quantity of water on a daily basis. Restaurants need water for food preparation, such as drinking water and in the kitchen.

Furthermore, laundry service, swimming pools, heating or cooling tower operations are just a few examples how hotels utilize water.



Benefits of Vulcan

- ▶ Reduces scale deposits in the piping system
- ▶ Longer life and improved performance of appliances
- ▶ Fewer maintenance visits required on water heaters, washing machines, etc.
- ▶ Reduction in cleaning time and labour costs
- ▶ Reduction in heating costs
- ▶ Savings on soap and cleaning agents
- ▶ Softer towels and bed linen



a) Without treatment

b) With Vulcan treatment

Restaurant kitchens often have problems with scale deposits, bacterial growth or unpleasant odors. Several studies explain the benefits of Vulcan in applications such as ice machines, grease traps and kitchen equipment. Pictures a/b show the results in a grease trap before and after treatment. As Vulcan works without chemicals or salt, the natural taste of water is preserved. Vulcan reduces the amount of scale deposits. It offers you a permanent solution without ongoing costs, repairs or replacements.

Improved water quality

Pools are half-open loop systems which suffer constant water loss as the pool water evaporates. The water demands constant maintenance and chemicals need to be added to keep bacteria, algae, and air quality in compliance with standards. Vulcan improves the water quality and with this the effectiveness of certain substances. Vulcan reduces the cleaning effort for the pool itself, the water line, for tiles, grids, floors and walls.



Hotel whirlpool in a wellness area



Munich

Dear Mr. Christiani,

We are pleased to inform you that the water treatment unit has been working perfectly and to our full satisfaction ever since its installation in July.

Only a short time after that we observed that we no longer needed acetic or asorbic acid in order to clean the showers and shower heads in our hotel, which has more than 65 guests rooms, since the scale that

Mövenpick Restaurant
Potsdam



Reference Letter

Dear Sir,

our Mövenpick Restaurant opened in January 2000. After a short period of time we noticed a high level of limescale developing on the ice-cream makers. These calcification's could only be cleared bit by bit which is a time consuming process. To avoid potential losses, a short-term limescale filter was installed. The operating time of this filter is limited however and thus resulted in high costs.

At a trade fair visit we consulted the company CWT

"... We installed the Vulcan 5000 and the limescale which accumulates especially in the crushed ice makers can now be easily removed as it is converted into fine-grained powder. ..."



Application examples

- ▶ Hotels and resorts
- ▶ Restaurants and kitchens
- ▶ Wellness centers
- ▶ Swimming pools
- ▶ Food processing
- ▶ Cooling towers
- ▶ Golf courses
- ▶ Camping grounds
- ▶ Sport facilities



Prevents Scale and Rust

- ✓ Reduction of existing scale in the piping system
- ✓ Installation without cutting the pipe
- ✓ From ½" up to 40" pipe diameter
- ✓ Works on all pipe materials – iron, copper, plastic, stainless steel, PVC, compound pipes, PE-X, etc.
- ✓ 100% maintenance-free
- ✓ Eco-friendly solution without salt or chemicals
- ✓ Prolongs life of machinery and equipment
- ✓ Important minerals remain in the water
- ✓ Long life – fully cast in acrylic
- ✓ 10 year international warranty

Visible results of Vulcan water treatment - before and after



Swimming pool filter

Toilet bowl

Piping system

Requirements

The iron/metal content should best not exceed 1 ppm and manganese should be below 0.1 ppm. Vulcan works best with heating element surface temperatures of max. 203°F (95°C). Higher levels or temperatures might hinder the treatment strength in some cases.

Water hardness

Vulcan treats low, medium and extreme hardness of 900 ppm and more.

Typical hotel and kitchen equipment to monitor:

- Dishwashers: Please check the info on "dishwasher handling" by CWT.
- Convection ovens: Please check with the requirements in the oven's handbook.

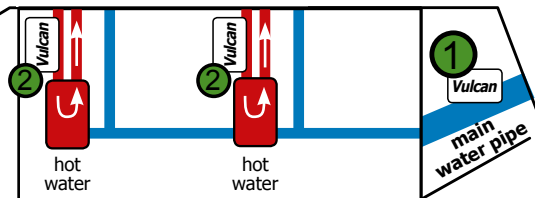
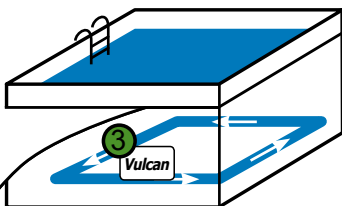
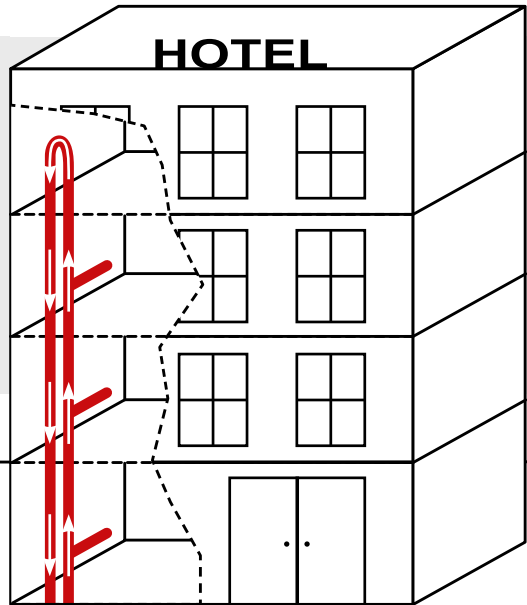


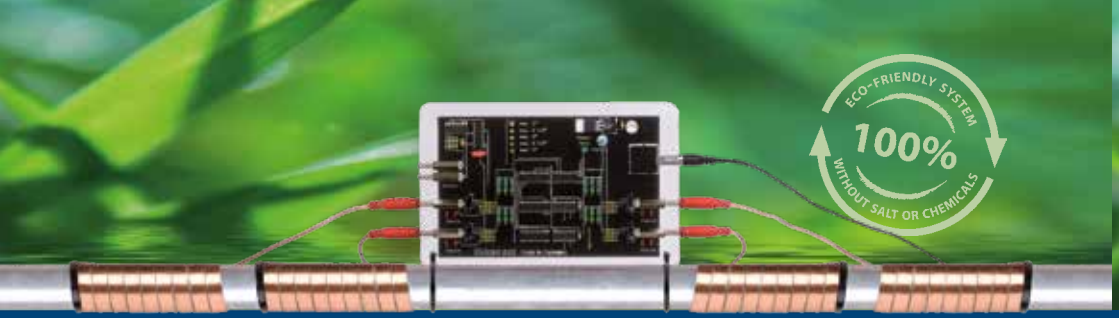
How to install Vulcan in Hotels / Apartment Buildings / Condominiums

In hotels and larger buildings there are always different areas to consider. Below is an example of a typical Vulcan installation in a hotel.

Installation areas are often the main building cold water supply (1), one or several hot water circulations (2) for the higher floor levels, in pool & spa operations (3), in restaurant sections etc. **Each water circulation needs an own Vulcan.**

- ① Main water pipe
- ② Hot water circulation(s)
(install Vulcan on the return pipe, before the heat exchanger on **each** hot water circulation)
- ③ Pool water circulation
(install Vulcan after the sand filter)





How to choose the right Vulcan size

Hotels / Apartment Buildings / Condominiums

For buildings with peak times of high water capacities, you have to choose the following Vulcan size. To choose the right Vulcan model, check the pipe diameter at the main water pipe.

Pipe Diameter	Model
max. 2"	Vulcan S10
2½" - 3"	Vulcan S25
3½" - 4"	Vulcan S50
4½" - 5"	Vulcan S100
5½" - 6"	Vulcan S150
7" - 8"	Vulcan S250
9" - 10"	Vulcan S350
11" - 16"	Vulcan S500

Application examples

- ▶ Hotels & resorts
- ▶ Apartment houses
- ▶ Condominiums
- ▶ Dormitories
- ▶ Hospitals
- ▶ Retirement homes
- ▶ Large living buildings
- ▶ etc.

Quality - Made in Germany

- ▶ Manufactured by Christiani Wassertechnik GmbH (CWT) in Germany
- ▶ Over 30 years of experience in physical water treatment
- ▶ Successful in more than 70 countries worldwide
- ▶ 10 years international warranty

