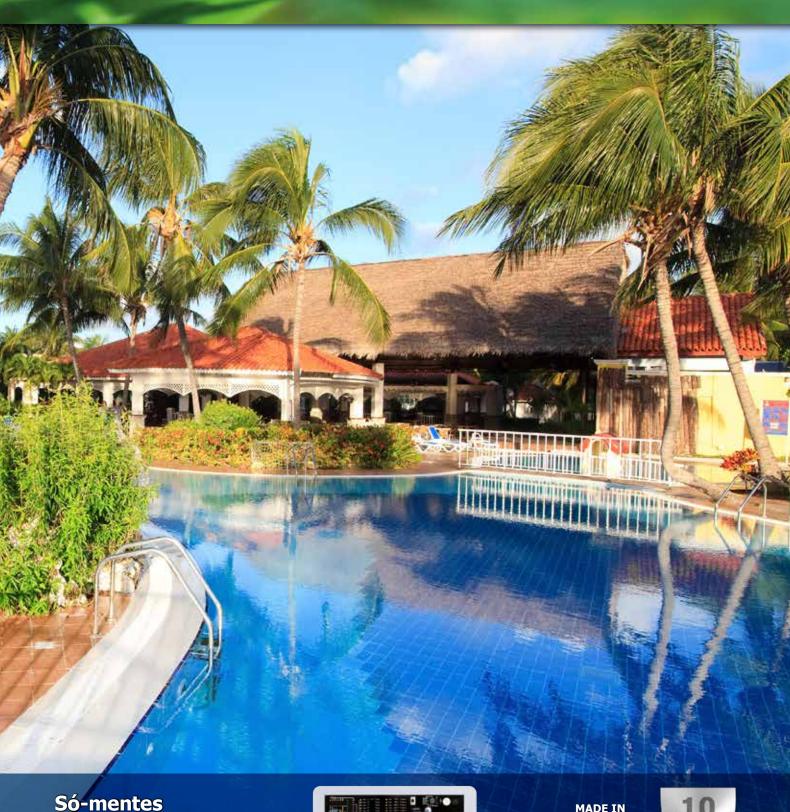


# Elektronikus vízkőmentesítő rendszer Vendéglátóipari alkalmazások



Só-mentes Mágnesesség-mentes Vegyszer-mentes









### Vulcan — Alternatíva a vízlágyítóknak

A vendéglátóipar napi szinten rengeteg vizet használ.

Az éttermek az ételek elkészítéséhez, mosogatáshoz és ivóvízként.

Továbbá a mosodák, az úszómedencék, a fűtő és hűtő renszerek működtetéséhez, ezek csak kiragadott példák a szállodák vízhasználatára.





- Csökkenti a vízkőlerakódásokat a csőhálózatban
- A berendezések hosszabb ideig és megbízhatóbban működnek
- Kevesebb a fűtési költség
- Kevesebb a szappan és a tisztítószer felhasználás
- Puhább törölközők és ágynemük
- ► A takarítás gyorsabb, kevesebb munkaráfordítás szükséges
- ► Kevesebb karbantartás és ellenőrzés a vízmelegítőknél, mosógépeknél







b, Vulcannal kezelve

Az éttermek konyháiban gyakran találkozni a vízkő okozta problémákkal, baktérium telepek vagy kellemetlen szagok formájában. Több tanulmány is elmagyarázza a Vulcan előnyeit olyan eszközöknél mint a jéggépek, a zsírfogók vagy más konyhai felszerelések.

Az a/b képek mutatják egy zsírfogón látható különbséget kezelés előtt és után. Mivel a Vulcan vegyszerek és só nélkül működik a víz természetes íze megmarad. A Vulcan lecsökkenti a vízkő lerakódásokat. Egy folyamatos megoldást biztosít költségek, javítások és kényszerű cserék nélkül.

### Jobb vízminőség

A medencék olyan félig nyílt rendszerek amelyek a párolgás miatt folyamatosan vizet vesztenek. A víz minőségét folyamatosan ellenőrizni kell, a baktériumok, algák mennyiségének és a levegőminőség határértékeinek betartásához folyamatosan vegyszereket adagolva.

A Vulcan javítja a vízminőséget, növeli a tisztítószerek hatékonyságát, így azokból kevesebbet kell használni. A vízhálózat, a csempék, a rácsok, a padlózat és a falak takarítása egyszerűbb és gyorsabb lesz.



## Vulcan

### Meggátolja a vízkő és rozsda képződést

- ✓ A meglévő vízkőkiválások csökkentése a csőhálózatban
- ✓ A cső megbontása nélkül telepíthető
- √ ½"-tól akár 40" csőátmérőig
- Bármilyen anyagú csőre alkalmas-vas, réz, műanyag, rozsdamentes acél, PVC, kombinált csövek, PE-X, stb.
- √ 100%-ban karbantartás mentes

- ✓ Környezetbarát megoldás só és vegyszerek nélkül
- Meghosszabbítja a gépek és berendezések élettartamát
- √ A fontos ásványi anyagok benne maradnak a vízben
- ✓ Rendkívül hosszú élettartam- műgyanta védőborítás
- √ 10 év nemzetközi garancia



### Alkalmazási területek

Hotelek és üdülő telepek Konyhák Éttermek és konyhák Hűtőtornyok Wellness központok Golfpályák Gyógyfürdők Kempingek

Uszodák Sportlétesítmények

Étel készítés ...



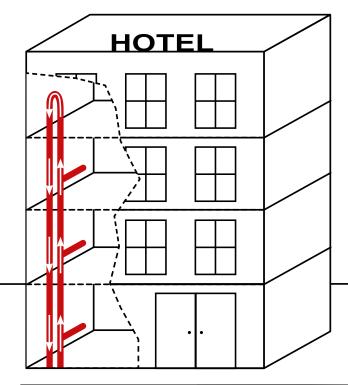
# Hogyan telepítsük a Vulcan berendezést?

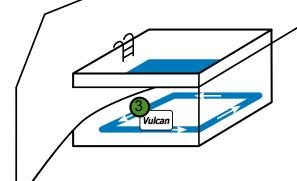
A szállodákban és a nagyobb épületekben több területet is figyelmbe kell venni.

Alul egy tipikus szállodai példát találnak.

A főbb kezelési területek a főépület hideg vizes betáp csöve (1) a meleg víz (fűtés) cirkulációs ága(i) (2) a magasabb emeleteken, a medence és fürdő kiszolgáló rendszere (3) az éttermi és konyha szekció, stb.

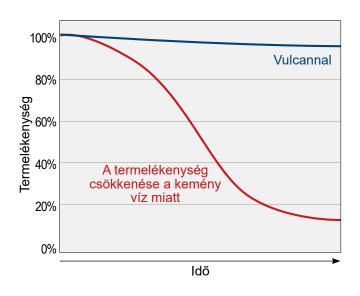
<u>Célszerű mindegyik körre külön Vulcan</u> <u>berendezést telepíteni.</u>

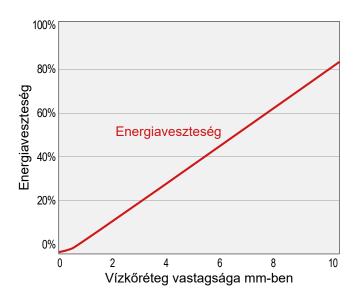






### Termelékenység és energia -veszteség a kemény víz következtében





### Pénzmegtakarítás a szállodában a Vulcan használatával

- Energia megtakarítás a melegvíz és a fűtési rendszerben (1mm-nyi vízkő réteg = 15%-kal nagyobb energiafogyasztás).
- 2 Nincs szükség a boiler kisavaztatására kétévente egy szakemberrel.
- 3 Akár 50%-os mosószer megtakarítás.
- 4 Megtakarítás az öblítőszeren.
- 5 A mosogatógép csak minimális sót igényel.
- 6 Megtakarítás az agresszív tisztítószereken.
- 7 Megtakarítás a személyes higiéniához használt szereken (sampon, szappan, bőrápoló).
- 8 Kevesebb a takarítási idő és a munkaerő költség.
- 9 A csőhálózat és a berendezések hosszabb életűek (mosógép, mosogatógép, kávéfőző, vízmelegítők, stb.).
- 10 A mosógépek, mosogatógépek, vízmelegítők szervíz ciklusa kitolódik.







### A vendéglátóipari alkalmazások előnyei



### Csőhálózat

A VULCAN megvédi a teljes csőhálózatot és csökkenti a meglévő lerakódásokat. A vízkő kimosódik a rendszerből, és finom porként könnyedén eltávolítható lesz.



### Sampon és szappan

A víz megváltozott felületi szerkezetének köszönhetően a sampon és a szappan jobban habzik, ezért kevesebb is elég.



### Csempék és szerelvények

A vízcsepp foltok könnyedén eltüntethetők egy nedves törlőkendő vagy szivacs segítségével.



### Ételek és italok

Az oldott fontos ásványi anyagok benne maradnak a vízben. Az megőrzi természetes friss ízét.



### Mosogatógépek

Nyugodtan használjon kevesebb mosogatószert, és a só adagolását is állítsa a lágy vizes értékekhez (kisebb mennyiségre).



### Személyes higiénia és bőrápolás

A haját és a bőrét lágyabbnak fogja érezni. Kevesebb allergiás tünet lesz, kevesebb ápolószer szükséges.



### Csökkenti a baktériumok mennyiségét

A vízkő csökkenésével a baktériumok táptalajául szolgáló biofilm képződés is csökken.



### Mosógépek

A lágy víznek megfelelően csökkentheti a mosószer mennyiségét. Nem kell öblítőt és agresszív vízkőoldót használnia. Alacsonyabb karbantartási költségek.



### Fúvókák és zuhanyfejek

tisztítása egyszerűbb, és nem igényel agresszív vegyszereket. Az élettartamuk nő.



### Hűtőtornyok

Kevesebb tisztítási ütem. Csökkentett vízfogyasztás és maximált életciklus.

### A Vulcan vízkezelés látható eredményei előtte és utána













Medence szűrők

WC kagyló

Csőhálózat

### Minőségi termék – Made in Germany

- A Christiani Wassertechnik GmbH gyártmánya Németországból
- ► Több mint 40 éves tapasztalat a fizikai vízkezelésben
- Sikeres alkalmazások világszerte több mint 70 országban
- ▶ 10 év nemzetközi garancia

















# HYATT Hyatt Regency Xi'an is a five-star hotel located on the side of Qujiang South Lake. It has a lake view and is in the middle of the city with the comfort and quiet. Most rooms have a separate balcony and lake view.

### **Installation details**

Location: Hyatt Regency Xi'an

Model: Volcon S10

Area: the water main of the Chinese kitchen

Installed by: Hengsheng Chang Environmental Protection Technology Co., Ltd

### **Installation purpose**

The two steamers in the Chinese kitchen had been scaled badly, they had been corroded and damaged in 2 years. The client used to clean with acid once a month, but the steamed food had the taste of citric acid, and the acid would even damage the equipment. Therefore, the client is looking for an efficient way to remove the scale without bad odor after cleaning.



Vulcan S10 was installed on the main water line of the Chinese kitchen.

### The results

One month after the Vulcan S10 was installed, we opened the sewage outlet of the Chinese kitchen, and found that the scale scrap came out. At the same time, we compared the sewage outlet of the western kitchen without Vulcan, there is no scale coming out. The hotel manager is very satisfied with the results and is making a new purchase.

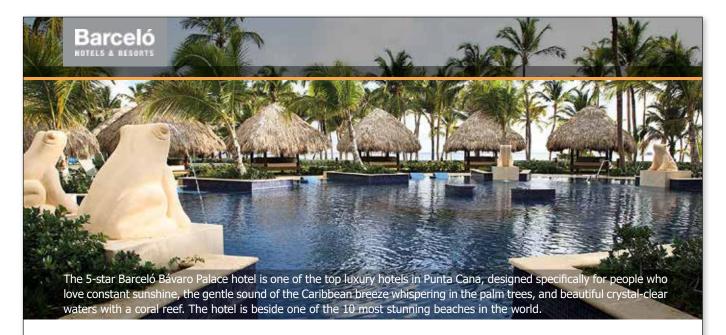


The scale scrap came out of the steamer in the Chinese kitchen.









### **Installation details**

**Location:** Barceló Bávaro Palace

La Antagracia, Dominican Republic

www.barcelo.com

**Models:** 2 x Moon S100 in hotel's main hot water lines

3 x Wiscon S250 for cooling towers 4 x Wiscon S500 for cooling towers

**Installed by:** InterClima

### **Installation purpose**

Most of the hotels in the area of Bávaro/Punta Cana in eastern Dominican Republic depend on ground water wells for their domestic water supply, using traditional water softening equipment to reduce the scale and hardness of the water. The fact is that some of these resorts have very poor maintenance resulting in extensive scaling of cooling towers and domestic hot water piping and equipment.

### The results

The project began with a mechanical room energy audit resulting in a great opportunity to upgrade the existing equipment with a very short payback period. The original installation was sold with an estimated payback of less than 2 years. To our customer's happy surprise, the actual payback was 9 months! The hotel maintenance manager is very impressed with the performance of the Vulcan systems, this opened up many additional opportunities including the subsequent chiller and cooling tower replacements.

Before Vulcan S100 was installed in hotel's main hot water line, the storage tanks had a solid 3 cm thick scale layer inside them and the pumping pressure from the booster set was at maximum while being unable to deliver adequate water pressure to the end of the line hotel rooms. After the 3 months period, an inspection of the inside of the storage tanks revealed that the scale layer was soft allowing them to mechanically clean them removing most of the calcium deposits. Other the following 12 to 18 months, the distribution lines also cleared up resulting in much improved flow and lower pumping costs from the booster sets.

The manager was instrumental in the approval of the resent trial installation of an S250 in the Royalton White Sands (Jamaica). We will continue to use the Barceló success in our future presentations.









### Karnavati Club Hotel in Ahmedabad, India

A prestigious name known among the most known clubs and recreational organizations of Ahmedabad is *The Karnavati Club*. The club, with an area of 500,000 sq.feet is located on the Sarkhej-Gandhinagar Highway. The club was established in 1989. And today, it is an ultimate success in the arena of recreational clubs.

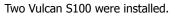
**Installed:** 1 x Vulcan S100 for swimming pool

1 x Vulcan S100 for the utility

**Installed by:** <u>BENCHM ∧RK</u> Agencies PVT Ltd





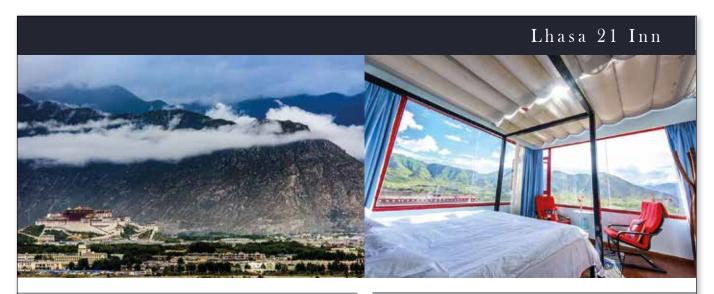




Salt based softener is replaced by Vulcan S100.







### **Installation** details

Location: Lhasa 21 Inn, Tibet

Model: Vulcan 5000

Area: Water main

Installed by: Shaanxi Wasser

### **Installation Purpose**

In April 2017, a 6-ton tubular solar water heating system was installed. Without any water treatment, as of May 2018, due to the serious scaling problems, manual descaling and system maintenance had been made for 3 times. Even solar glass tubes, headers, valves, pumps, etc. must be replaced, the client had a large loss.





### The results

1. After installing Vulcan 5000 for 1 month, the scales of the shower heads have been significantly reduced.





2. The scales on the float valve in the hot water tank have been softened, they can easily be tapped off.





3. After 3 months of installation, we cleaned the hot water tank, and found a large amount of scales were drained out. The photo below is the scales removed from the water tank. Also, the heat transfer efficiency of the solar system has been significantly improved, the performance almost has stayed the same just like the beginning of installing Vulcan.











### Acacia Hotel, Manila, Philippines

The Acacia Hotel is a five-star Hotel locating in Alabang, Manila.

Acacia Hotel Manila exhibits the excellence of a homegrown brand that is deeply rooted in passion, excellence, and service.

The hotel prides itself in creating an atmosphere of hospitality and exemplary service.

Like other hotels, they use chiller systems with cooling towers to provide cool air for whole hotel. And with hard water, they have problems with scale in the heat exchanger and they have used chemicals to solve.

With a desire to replace chemicals, they are looking for physical water treatments and find Vulcan. After installing Vulcan S500 unit, their heat exchanger always stays clean without any chemicals.



Here is the comment of the chief engineer: "The results are positive. We have recorded condenser approach value for 2 to 6 months after cleaning the tubes of the condenser, and there was a significant decrease on our chillers' condenser approaches. Our cooling towers remained clean and some of the stockup and passing valves are now usable. As regards the performance of the unit, we found it works well."

Model: Vulcan S500

### **Installation Location:**

Main water supply of the cooling tower

### Purpose:

- · Clean scale deposit
- Prevent scale
- Reduce maintenance costs
- · Replace chemical treatment and softener systems

### **Before Vulcan installation:**

- · Scale deposits in the heat exchanger
- · Pipes clog

### After Vulcan installation:

- · Chiller and cooling tower stay clean
- No need to use chemicals

















# Guanfang Hotel Honghe

### **Installation details**

Location: Guanfang Hotel Honghe

Model: Vulcan S25

Area: On the main water pipe of the guest

room Builing B

Purpose: To solve the scaling problems of the

central air conditioning system, hot water supply system and kitchen water

system



Vulcan S25 was installed on the main water pipe of the guest room Builing B.



### After 2 months of installation

After installing Vulcan, the water supply of Building B is no longer blocked, and the scale of the valve and the shower heads in the guest rooms have been reduced, which also greatly reduces the manual maintenance and improves work efficiency.

Kunming Guanfang Group has a total of 5 five-star hotels. Because of the successful trial of Guanfang Hotel Honghe, the board of directors of the group has decided that all hotels will use the Vulcan anti-scale system as long as there is scale problem.



On the left is the pipe (without scale) after Vulcan S25 was installed for 2 months; on the right is the pipe without any water treatment.

















### **Installation Details**

Location: Palm Beach Hotel Hammamet, Tunisia

Vulcan S25 Model:

1. To protect the hot water circuit, the kitchen and the Spa Purpose:

2. To use an eco-friendly solution, without chemicals

3. To reduce the workload of cleaning the pipes with high pressure water gun

Installer: STPE+

### **Palm Beach Club Hammamet**

The hotel is located on one of the most beautiful beaches of the Gulf of Hammamet, in a magnificent 5 acres garden.

All rooms have sea, garden or pool views with terrace or balcony.



After Vulcan S25 had been installed for **6 months**, the boiler was opened: scale had been softer and left out.



with a water gun.



The scale deposits were easily removed The scale deposits were drained out of the boiler with ZERO chemical.





### Reason for Vulcan installation

Engineering had to manually remove scale from pumps, valves, kitchen equipment and from the 102 individual electric hot water heaters every 6 months because the property relies entirely on hard ground water which caused significant scale issues year after year.

### **Result installation of Vulcan S25**

The Chief Engineer reported after an initial 6 months following installation of the electronic anti-scale system Vulcan S25 they were able to easily flush out already dislodged scale from each tank heating unit – instead of scraping away hard scale from the elements. After a second inspection the units were found to be almost entirely free of scale. Future inspections have now been reduced to annual, random inspections only – which is felt to be sufficient to ensure overall domestic water piping system cleanliness.

### Inspection after 6 months

One of the water heaters at a Sea View Bungalow (photo) was opened for inspection and showed much dislodged scale particles at the bottom of the tank, with some easily removed soft scale still present on the element only. This water heater unit had not been scheduled for random inspection since installation of the Vulcan unit at the Resort.

### Additional benefits reported

The General Manager and CE reported that shortly after the Vulcan had been installed, the linen being washed at the inhouse Laundry plant was softer and whiter. In addition, Food and Beverage staff reported brighter glass ware with the detergents working much better. Housekeeping staff reported that the usual white spots on bathroom tubs, counters and floors had entirely disappeared and that outlets of showers and taps needed no longer special attention with only basic wiping being sufficient to maintain their shine.

### Holiday Resort Lombok, Indonesia

189 Bungalows / various types of guest rooms / extensive landscaped gardens / 2 Swimming Pools / several Food and Beverage outlets www.holidayresort-lombok.com



Anti-Scale System Vulcan S25 installed



The little remaining scale is soft and easily flushed out since installation of the Vulcan Anti-Scale System.







# ibis

### ibis Surabaya City Center Hotel Economy hotel for business and leisure

The 224 modern and minimalist rooms feature the new ibis bedding, 4 modern High Tech meeting rooms, a lobby bar and restaurant. Perfect for business and leisure travelers.

### **Installation details**

Location: IBIS Hotel Surabaya

Indonesia

Model: Vulcan S25

Area: water main

Installer: PT Biosolutions

www.biosolutions.co.id

# Vulcan \$25 was installed on the main water pipe.



### Vulcan effect — before and after

Before installing the Vulcan system, the pipeline had a lot of sedimentation of scale, the client had to do manual cleaning.

After 3 months of Vulcan, it has begun to erode and clean the scale out of the system.

The clients are happy with the performance of Vulcan.

### **Hot Water Tank**





After 3 months scale is no longer forming and the hot water tank is free of scale and sediment.

### Hot Water Pipe





After 3 months the rust in the pipe has lightened and the amount of scale is gradually reducing.





Hotel Méridien N'fis Avenue Mohamed VI, Marrakesh 40000, Morocco

www.lemeridien.com



### **Certificate of reference for the Vulcan Descaler**

In order to remove and prevent scale and rust issues affecting our pool areas and various hydraulic installations, we have purchased and installed the Vulcan S25 unit from CWT International.

After receiving a very satisfactory result from the Vulcan S25, we plan to entrust the Vulcan Descaler range with any future scale or rust problems in the Le Meridien N'fis.



Hotel Méridien N'fis pool and spa area protected by Vulcan S25

Kind Regards,

A Moursil. Technical Director.







Andy Dickson Vulcan Water Products

Dear Andy,

I just wanted to extend my sincerest thanks to you and your company. I run the Comfort Inn in Moriarty, New Mexico. Anyone familiar with Moriarty knows that the water here is awful. We battle with water hardness like no Mexico. Anyone familiar with Moriarty knows that the water here is awful. We battle with water hardness like no other place I know. Our hotel had been spending thousands of dollars installing water softeners and going through excessive amounts of salt and descaler to try to keep up. This would manifest itself in calcium buildup in our kitchen and bathroom fixtures, our ice machine, and our pool.

We recently had to nearly replace our ice machine because the water hardness had repeatedly created buildup We recently had to nearly replace our ice machine because the water hardness had repeatedly created buildup and in the hotel business, ice is a must for our kitchen and our guests. We would get constant complaints from our busekeepers and guests because as soon as we would get the buildup off of the bathroom fixtures it would be back again and just as hard to get off as the last time. We had to replace fixtures far too often. Since you installed the new Vulcan \$100 water system, we are able to easily wipe off any buildup and my housekeeping staff is very pleased. I haven't had to replace any fixtures either. The ice machine works great and for the first time in a long time, we

The really good news is our pool. The water was so awful that we had a pool heater break due to the massive datum buildup. Huge expense to replace. When we replaced the pool heater within months we had to add descaler and it was impossible to keep the chemical balance right. The maintenance on the pool was ridiculous. Since having had the new Yulcan 5000 water system for the pool in addition to the hotel, you would not believe the difference of the pool of addition to the hotel, you would not believe the difference of the pool of addition to the hotel, you would not believe the difference of the pool of the The pool practically takes care of itself. Maintenance is minimal, the pool stays clear and the equipment just

I would recommend this system to anyone for their business or home. The transformation at our facility has been nothing short of actionating. The money time and maintenance is the standard of actionating. I would recommend this system to anyther for their uponless or name. The transformation is compared to matching short of astounding. The money, time, and maintenance we have saved cannot be overstated. In the hotel business where we are open 24/7 that says a lot.

Thank you again, Andy!

Sincerely,

Laurel Bowie General Manager Comfort Inn Moriarty, New Mexico











































