

# **Electronic Anti-Scale System Food and Beverage Sector**



Salt-Free Chemical-Free Magnetism-Free







#### The alternative to water softeners

Restaurants and kitchens go through a large quantity of water on a daily basis, such as drinking water and food preparation in the kitchen.

Our anti-scaling system ensures all appliances which come in contact with water will obtain their maximum life expectancy as well as significantly reducing their maintenance requirements.

It is a perfect salt-free, eco-friendly and cost-saving solution to your hard water problems.





- Reduces scale deposits in the piping system
- Longer life and improved performance of water based appliances
- ► Less time and effort spent on cleaning
- ► Considerable savings on cleaning agents
- ► Food and beverages keep their natural taste
- Minimizing overall operating costs and maintenance expenses
- ► Fewer maintenance visits required on water heaters, dishwashers, coffee machines, etc.







b)With treatment

Restaurant kitchens often have problems with scale deposits, bacterial growth or unpleasant odours. Several studies explain the benefits of our anti-scale system 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 the System works without chemicals or salt, the natural taste of water is preserved. It reduces the amount of scale deposits. It offers you a permanent solution without ongoing costs, repairs or replacements.

## **Eco-friendly water treatment**

The system treats the water with special electronic impulses that take away the adhesive power of the scale particles. This is 100% eco-friendly and works without any chemicals or salt. Scale components are simply washed away with the water as a fine powder. It also reduces already existing deposits and generates a protective layer that prevents rust and pitting corrosion.



#### **Prevents scale and rust**

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- 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 water treatment — before and after













Piping system

Grill plate in a restaurant

Toilet bowl



Ice machines operate more efficiently and ice cube formation is enhanced.



Dishwasher scale is reduced significantly and dishware is now spot-free.



Grease traps have reduced odours and more consistent, less cluttering grease.

## **Quality**

- ▶ Over 40 years of experience in physical water treatment
- ▶ Successful in more than 70 countries worldwide
- ▶ 10 years international warranty







Result:

#### Reference







#### **Installation Details**

Location: White Castle #32

New York, USA

www.whitecastle.com

Area: Unit 1 was installed on the ice

machine after the carbon filters.

Unit 2 was installed on the main

inlet line.

The calcium was completely

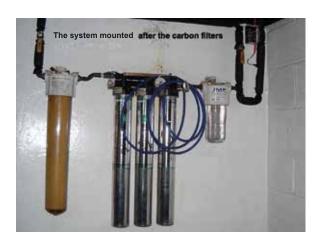
removed in one area, and normal

equipment cleaning schedules are

prolonged.

White Castle have 30 plus units installed. The newer restaurants have a system installed on the

inlet main.





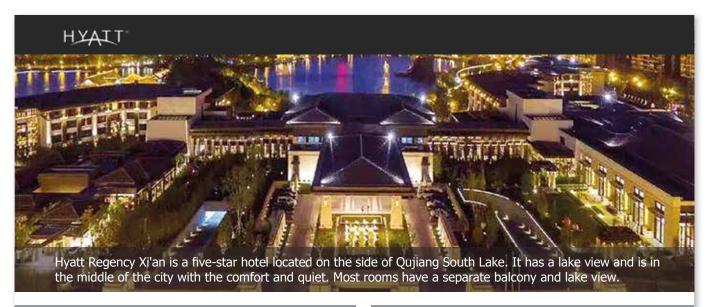


Pan before the installation, hard calcium and etched line present.



After the installation — pan area is now completely scale-free. There is a slight indentation into the pan at the waterline.





#### **Installation details**

Location: Hyatt Regency Xi'an

Area: The water main of the Chinese kitchen

#### **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 odour after cleaning.



The unit was installed on the main water line of the Chinese kitchen.

#### The results

One month after the system 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 the descaler, 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.









# Anti- Scale System for Grease Traps

#### **3 Months Test Report**

KIYOKAWA Plating Industry in Fukui, Japan

The system has a trouble free design and easy installation. The LED light always blinks dependably as it shows the processing conditions.

I have compared the state of the grease trap before and after the installation. Before installation, I noticed strong odours when opening the hole. When I opened the hole one month after the installation, no such odours were present.

As for the cleaning intervals, monthly cleaning may now not be required. The effect and cleaning intervals of the system will require an annual observation, however, I believe the amount of cleaning will be reduced remarkably.



The unit was installed in the factory kitchen

#### February 16th - Start situation before the system was installed



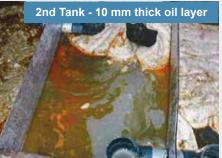




March 22nd 1 month with the system



May 18th - 3 months with anti-scale treatment





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# **Grease Trap in a Kitchen**

#### 3 Months Test

To alleviate the overflow of drainage out of the basket due to oil balls in the grease trap under the sink of the counter in the cookery on the fifth floor of the building. Also, to save the administrative and maintenance expenses by reducing the periodical cleanings used to be conducted several times a year.



#### June 13th | Before the installation





Usual level of standing water.

Grease trap under the countertop

# June 17th | Installation of the anti-scale system

For treating water in the cookery on the fifth floor, the system is installed on the vertical piping in the warehouse where the nearest main water pipe is exposed. The effectiveness of the system appears in all the service water on the fifth floor that is supplied through this piping.

#### Verification of the effectiveness

The status of the grease trap upon installation of the system was confirmed, and the changes of the statuses were observed for approximately five months from the start of the operation. In almost all cases, the effectiveness can be confirmed through the observation for about 3 months.

#### September 12th



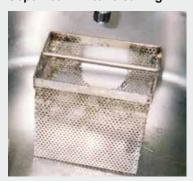
The basket after being washed by hosing. The portions usually being contacted with the treated water are cleaned easily with a water flow from the tap.

#### Sept. 20th - Before cleaning



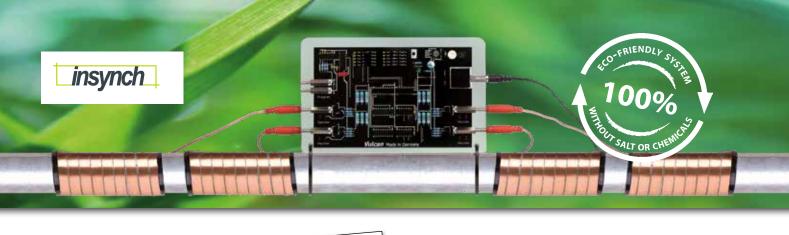
The status after being used without cleaning since the installation in June (no adhered materials are seen on the portions usually contacting with water).

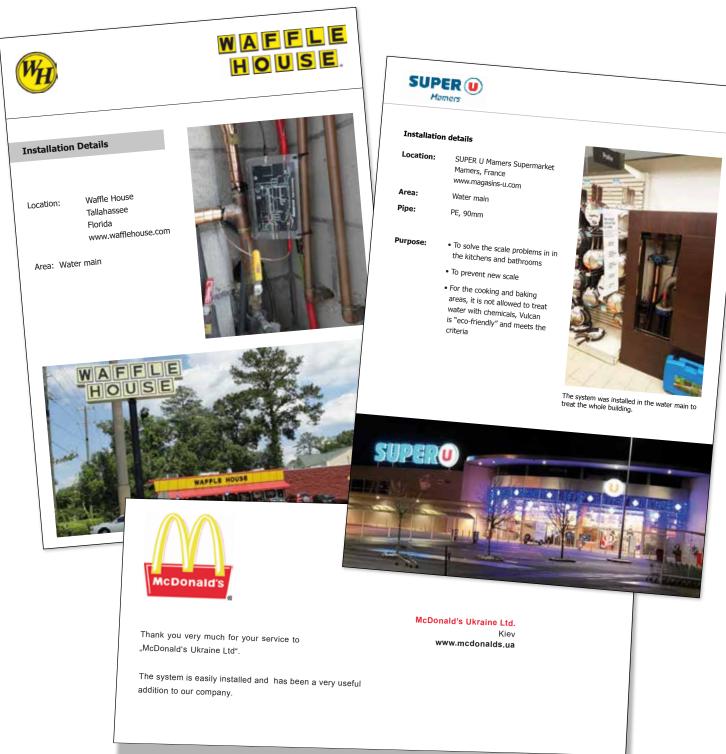
Sept. 20th - After cleaning



Grease trap was cleaned with water flow under the sink.

Similar effects have been reported at drainages in food factories, restaurants and kitchens. Many anti-scale system installations showed that the treated water had substantial cleaning effect even with extremely reduction of conventionally used detergents. There were even some cases where the use of detergent (such as cationic detergent) causes a buildup of a thin film of dirt. Cationic detergents should not be used. With the portions that do not contact with the treatment water, this effect cannot be expected. The system has no effect of breaking or resolving solids in drainage. Although the system has no disinfection effect, its prevention of dirt from adhering to the basket and the net contributes to the reduction of mold's food source.





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