



Vulcan Anti-Scale System Test in Large Industry





Vulcan Anti-Scale System

The eco-friendly electronic system

Vulcan provides an eco-friendly water treatment system which prevents scale and rust in the water pipes and equipment. The method is based on the Vulcan-Impulse-Technology and treats the water without applying any chemicals or salt.

Special electronic impulses change the crystallization process of the calcium in hard water, causing the particles to lose their ability to stick to surfaces.



- No use of salt or chemicals
- Maintenance-Free
- Installation without cutting the pipes
- For pipe diameters from 1/2" to 40" (10-1000 mm)
- Fully cast in acrylic for optimal quality endurance
- Works on every pipe material – iron, inox, copper, stainless steel, galvanized iron, plastic, PVC, PE-x, hose, compound pipes (any material mixture), etc.



The 3 Vulcan Effects



1 Prevents scaling on surfaces

Vulcan based water treatment modifies the crystallization of scale without changing the original water quality. This electronic process generates stick-structured crystal rods that do not adhere to surfaces.



2 Cleans the piping system

Vulcan carefully removes scale build up in the piping system by releasing small amounts of carbonic acid, which dissolves the scale. The scale is washed away with the water as a fine powder.



3 Protects against scale and corrosion

Vulcan generates a controlled electrophoresis process which produces a protective metal-carbonate layer. This thin layer remains in the pipe and acts as protection against rust and corrosion.



German Technology
Absolutely Magnetism-Free

No Salt
No Chemicals
No Maintenance



Installation Details:

Installation location: TopTex Morocco



Installed Vulcan model: Vulcan S250



Installation area: 4" stainless steel pipe.
Hot water return pipe to the heat exchanger.

Installer: STE ETCT INDUSTRIE

STE ETCT INDUSTRIE:

We decided to make a test in the factory TopTex Maroc to convince the customer to the result of the Vulcan Anti-Scale system.

The objective was to see the change on the old limescale in the chosen pipe.

Factory situation before Vulcan was installed:



Active water softener



Stopped water softener

The factory uses two large softeners to treat the water. Even the use of water softeners also poses serious scale problems.

The water hardness is 40°fH (too hard water).

During the Vulcan test, the water softener continues to operate.

Scale problems at the factory before using Vulcan:

Hot water return pipe to the exchanger for cooling



Vulcan Installation:

We installed the Vulcan S250 before the hot water return pipe to the exchanger for cooling.



Before Vulcan was installed:



Elbow



Straight drive



Straight drive

Vulcan Testing Period:

The trial period was 2 to 3 weeks, but after the installation we noticed that the water does not spend all the time in the pipe, just at the time of the emptying of the machines (Estimation: water goes through the pipe 5 hours out of 24 hours of work).

So we increased the duration up to 4 weeks (with a simple calculation: 4 weeks of installation on this pipe = 5 days of treatment). So the results obtained after 4 weeks of installation is just 5 days of treatment.

Due to the results we have seen after 4 weeks, we decided to extend the test to 3 weeks to clean the pipes more and have more results.

Now you will find two pipe checks (1st check after 4 weeks of using Vulcan and 2nd check after 7 weeks of using Vulcan).

Vulcan results after 4 weeks:

After 4 weeks of installation we checked the pipe chosen for the test and we found results more than expected, we found that the limescale began to clean itself even after 5 days of treatment, given the state of the limescale, it takes more than 1 year for cleaning.

The test was realized with one of our new partner in the boilers and industrial maintenance.



Vulcan results after 7 weeks:



Water basin

Scale took out from the bottom of the water basin



Future Benefits with Vulcan for the Factory:

- ✓ Productivity increase due to the reduction of scale incrustations
- ✓ Less time and effort spent on cleaning cooling towers
- ✓ Spend less on machinery maintenance
- ✓ More efficient use of energy costs
- ✓ Fast amortization of acquisition costs
- ✓ Reduces chemical use in many areas
- ✓ Maximum working life of production equipment
- ✓ More reliable water supply
- ✓ Extended cleaning intervals