



# The Electronic Anti-Scale System For Agriculture Applications



German Technology  
Absolutely Magnetism-Free

No Salt  
No Chemicals  
No Maintenance





## Vulcan – The eco-friendly solution

Water is a valuable resource which needs to be managed properly to maximize efficient usage. When hard water is used to irrigate crops and ornamental plants (corn, grain, potatoes, etc.), scale deposits form on plants and their leaves which obstruct contact with sunlight. This hinders the process of photosynthesis and therefore the growth of your plants.



### Benefits for your agriculture applications with Vulcan

- ▶ Reduction of limescale in pipes, sprinklers and filters
- ▶ No need of salt or aggressive chemicals
- ▶ Less time and effort spent on cleaning
- ▶ Fruits and vegetables keep their natural taste
- ▶ Minimizing the need for fertilizers and pesticides
- ▶ Improved plant growth



### Without salt or chemicals

Often scale acts as a magnifying glass with its crystal structures, which burns the plants. Salt based ion exchangers have a negative effect on the environment in agricultural applications because of residual nitrates that leach into the ground water. Because of this salty discharge, traditional water softeners are not eco-friendly. With strict regulations and restrictions on enterprises using "Eco-Friendly" or "Organically Grown" labels, Vulcan's chemical-free method is the solution of choice.

**HYDROPONIC STRAWBERRY GREENHOUSE**

**CLAROS FARM**

**INSTALLATION DETAILS**

**Application**  
Claros Farm Hydroponic Strawberry Greenhouse in Izmir, Turkey

**Model**  
Vulcan S50 installed at the irrigation system

**Purpose**  
Solving limescale problems in irrigation systems and eliminating blockages.

**Installer**  
ATILLA YILMAZ TARIM DANIŞMANLIK SAN. VE TİC.

**Results**  
With the introduction of Vulcan, the blockages in the irrigation system were not experienced anymore. After Vulcan started to be used, the plants can be fed more easily and the roots of the plants are stronger. It was noticed that fertilizer and water benefits increased. In addition, the minerals in the water changed into a useful form that can be taken by the plants after Vulcan. As a result, fertilizer savings between 30% and 50% were achieved.

Claros Farm offers a wide range of services, including greenhouse installations, consulting on hydroponic production, expert advice on entering foreign markets and the sale of greenhouse materials. [www.clarosfarm.com](http://www.clarosfarm.com)

Vulcan S50 installed at the irrigation system

[www.vulcanturkey.com](http://www.vulcanturkey.com) [info@vulcanturkey.com](mailto:info@vulcanturkey.com)

## Vulcan provides fresh water

With Vulcan, it is easier for plants to absorb the water. Vulcan is not only effective in the case of irrigation, but also in providing fresh water to livestock and poultry. In these applications, the clearing of nozzles and general maintenance of your water-related equipment will be required at much longer intervals. Bacteria will neither have a host environment to thrive in nor will not be able to accumulate and negatively affect plants and livestock.



## Application examples

- ▶ Irrigation fields and sprinklers
- ▶ Organic food plants
- ▶ Livestock farming
- ▶ Green houses
- ▶ Vineyards
- ▶ Fruit plantations
- ▶ Ornamental plants

## Vulcan at a tree nursery

"... all these years the leaves of the plants had a white color and not the well known green color.

After installing the Vulcan S25, I found out there is no more white sedimentation on the leaves and soil. Most of all I realized a big improvement in the growth of my plants. I also found out that there is better and quicker lathering, when we wash our hands or even clothes etc.

Finally, I must say that I really found the solution to my problem, which has been bothering me for all these years..."

### Carnation Production

antalya tarim  
NUTRITION SYSTEMS

Antalya Tarim is the distributor of De Ruiter Seeds since more than 25 years. Seed varieties include tomato, eggplant, cucumber, pepper, melon and rootstock. Antalya Tarim is involved in research and development projects on vegetable varieties not covered by the rest of the group.  
[www.antalyatarim.com.tr](http://www.antalyatarim.com.tr)

#### Results

The production of cut flowers requires intensive use of plant nutrients. After a trial period of about 5 months, the impressions were as follows. When it was observed that the plant has better roots and green parts than expected, leaf and soil analysis was performed again.

When we compared the analysis before and after the use of Vulcan, the analysis showed that after the use of Vulcan, there was a higher rate of plant nutrient transfer from the calcium and minerals in the water as well as from the reserves in the soil to the plant.

The absence of limescale stains on the green parts was also a positive result. There was an increase of the quality with the use of Vulcan. Especially the flower branch weight is an important criterion and we have observed an increase in this area. Fertilizer savings were achieved with the use of Vulcan.

#### Installation details

Installed at: Antalya Tarim A.S. in Antalya, Turkey

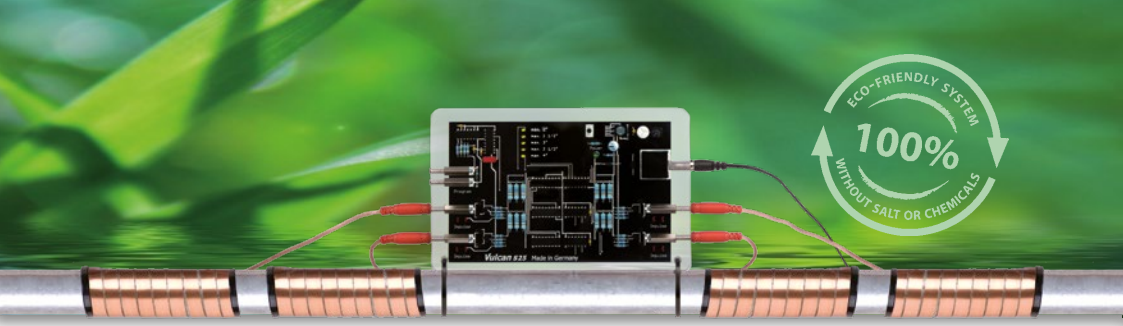
Model: **Vulcan S50** used for irrigation systems

#### Purpose

Solving limescale problems in irrigation systems. It was also aimed to prevent the use of limescale and bicarbonate-derived fertilizers in water in the growing environment.

Vulcan S50

antalya tarim



## **Vulcan** 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
- ✓ 25 year international warranty

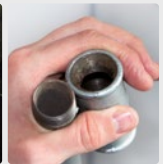
### Visible problems and results of Vulcan water treatment



Plants and turf



Biofilm in a piping system



Limescale in water lines

### Quality – Made in Germany

- ▶ Manufactured by Christiani Wassertechnik GmbH (CWT) in Germany
- ▶ Over 40 years of experience in physical water treatment
- ▶ Successful in more than 70 countries worldwide
- ▶ 25 years international warranty

