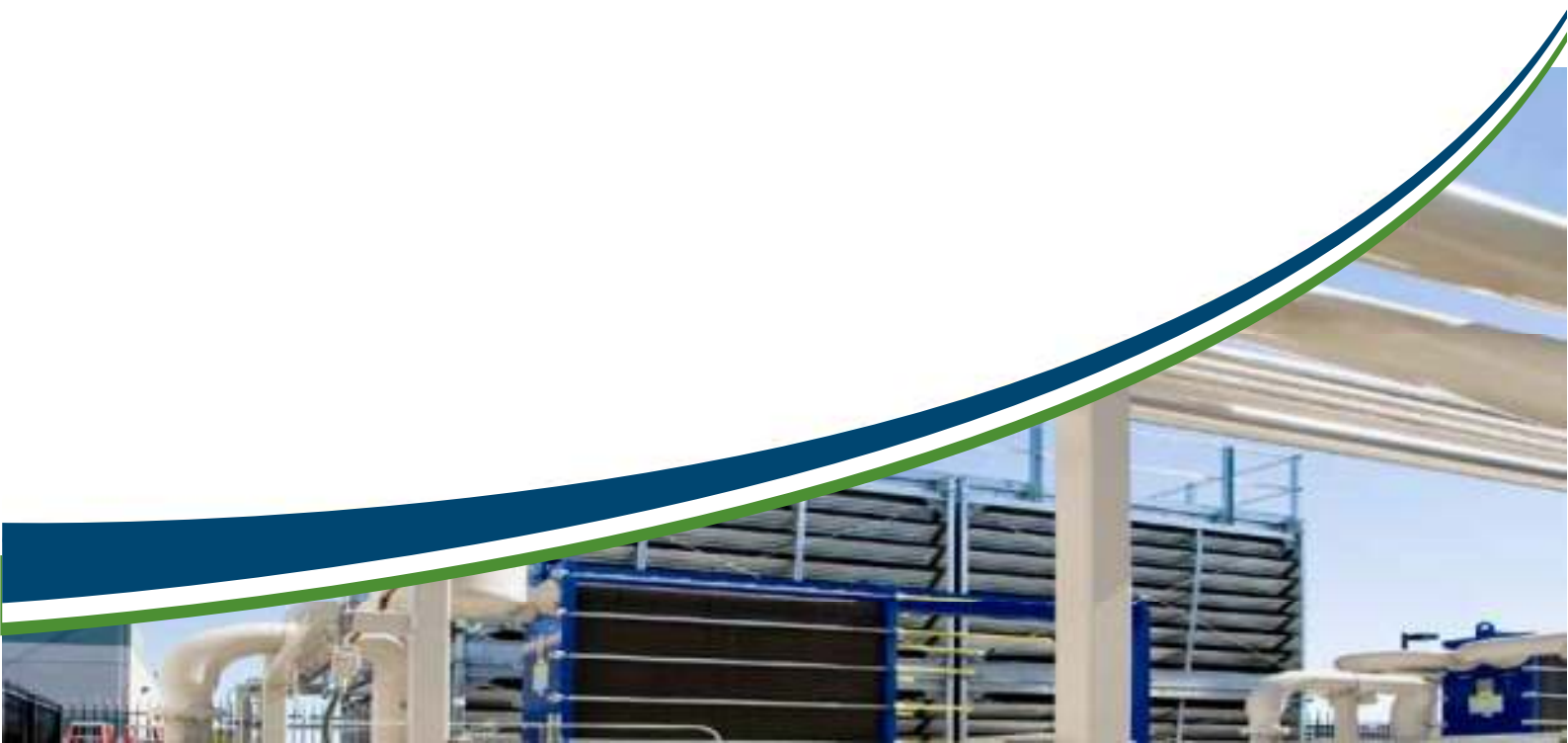


Cooling Towers

Chillers

Heat Exchangers



Commercial Cold Storage

USA

Commercial Cold Storage



1011 S 1st St,
Mt Vernon
WA 98273
USA

IWTNA
2607 Bridgeport Way West
Suite 1J University Place
WA 98466

Dear IWTNA,

Please find below the installation photos of the Vulcan S100 installed on the main line connected to 3 cooling towers.

Regards,

The Mt.Vernon Cold Storage Team

www.commercialcold.com



Vulcan S100 installed on cooling towers



Vulcan S100 installed outside



Florida State University - Engineering

USA

Florida State University
600 W. College Avenue
Tallahassee
FL 32306



To the Ackuritlabs team,

Please find below photos of the Vulcan Descaler installed in the Florida State University College of Engineering.

These pictures show 2 x Vulcan S100 units protecting the double chiller and pumps in the FAMU/FSU College of Engineering.

Regards,

The Florida State Engineering Team



Vulcan S100 units installed on the double chiller



Vulcan S100 units installed on the double chiller



Vulcan units protecting chiller pumps from scale and rust

Neptune Foods Restaurant

USA



Vulcan installed at:

Neptune Foods - Vernon
Seafood processing
90058 Vernon
California, USA

Arne Vestad - International Water Treatment North America

Dear CWT Team,

This cooling tower is one of three protected by the Vulcan S25 units in this location. The building is one of 47 buildings owned by Neptune Foods in Vernon LA, and this particular building does mainly seafood processing and packaging for consumers.

This picture was taken after 4 months the installation of the Vulcan S25. The tower was dirty/not cleaned before the Vulcan was installed.

Since the Vulcan installation, the cooling towers have been scale free and there has been no need for any chemical treatment.



Clean cooling tower after using Vulcan

Best Regards,
Arne Vestad

Water Wise

USA



Dick Van Voorhis
Salt-Free Water Systems
1429 Casco Bay Cir
Cicero IN 46034

RE: Vulcan Descaler as an alternative to chemical based cooling tower treatments

Dear Dick,

For the past two years, we have selected several of our existing customers and offered them the opportunity to have us install the Vulcan Non-Chemical Unit on their cooling towers, for the purpose of evaluating corrosion, scale and bacteria rates versus a traditional chemical treatment program.

We have installed 5 x Vulcan S25 & 2 x S10 units all in the upper New York State area.

Based on standard water test analysis, including Corrosion Coupon Testing and regular Bacteria Dip Slide results, we have concluded that the Vulcan Non Chemical System has been able to provide similar results, to those achieved using a chemical based treatment program.

Regards,

Michael Bromley
President
Water Wise of America Inc.
Rochester NY 14624

www.waterwiseofamerica.com

Chillers in a Cooling Tower

USA

INTERNATIONAL WATER TREATMENT
N O R T H A M E R I C A
Clean, Green, Affordable

Vulcan installed in a Chiller

Dear CWT Team,

Here are two pictures from a Chiller opened for a routine cleaning, but nothing to clean after two years with Vulcan treatment.



No scale formation after using Vulcan



This Chiller is connected to a Cooling Tower which is exposed to lots of air borne contamination from surrounding farms.

Best Regards

Arne Vestad
www.IWTNA.com

Spokane Public Schools Washington

USA



Vulcan installed in Spokane Public Schools

Dear CWT Team,

Spokane schools now have 6 Vulcan units installed.

One of the first Vulcan units is on a small cooling tower and this stays absolutely clean during the season. The tower was full of scale when we started and after 4 weeks, scale started to fall off in big chunks and now it is completely scale free.



Installation of Vulcan Descaler for the entire building's water supply in the Roosevelt school

Our first installation in Spokane schools was in Shaw Middle School, 50 years old building and with rusty/dirty looking water.

This was installed before the school started in the fall. After Christmas this year, the water is always clean and the janitor does not have to flush the piping anymore.

Have a great day.

Arne Vestad

IWTNA

Installation locations



Roosevelt Elementary School

333 West 14th Ave
Spokane, WA 99204-3627
USA



Shaw Middle School

4106 N. Cook St.
Spokane, WA 99207
USA

VacMet Coating & Engraving Service

USA



Coating & Engraving Service

Coating of metals with plastic or resins

IWTNA

Arne Vestad

2607 Bridgeport Way West

Suite 1J University Place

WA 98466

Vulcan anti-scale system

Dear Mr. Vestad,

I have noticed a definite improvement in the operation of our boilers. Typically, we would have several cooling coil plug ups during the hot weather season (a greatly extended season this year) and since the installation of the Vulcan, we have had zero plug ups and that translates into the saving of many hours of down time.

Based on that saving alone, the Vulcan has already paid for itself.

An additional benefit has been in the greatly reduced amount of cooling tower maintenance. The calcium buildup has been miniscule and the little bit that has accumulated can be easily washed away with a garden hose and nozzle.

I have also noticed a huge reduction in the iron stains in the bathroom fixtures here at the factory as well as at home where I installed the second unit. At home, I eliminated my water softener that was running on potassium due to the ancient iron pipes that run all through the house and barn.

The water seems to feel and react just as well with the Vulcan as it did with the softener and I no longer need to buy the expensive potassium and break my back lugging around the heavy bags to reload the water softener. I don't mean to sound like a commercial for the unit, but those are the honest facts and observations.

Please feel free to stop by the next time you are in the area.

Kindest regards,

Chuck Nelson

VacMet Inc. in California, USA

www.vacmet.com

Dynamit Nobel

Germany

Dynamit Nobel

AKTIENGESELLSCHAFT

WERK LÜLSDORF

DYNAMIT NOBEL AG, Werk Lültdorf, 5216 Niederkassel

Firma
Christiani Wassertechnik GmbH
Diepenbenden 25
5100 Aachen

Water treatment device

Dear CWT-team

Currently we have five devices from the Vulcan range in use.

Because of the high degree of hardness of our cooling tower water, we had to decalcify every few months. After we used the devices, the scale on the heat exchange pipes was drastically reduced. Thus the lifetime of these devices is getting longer.

Kind regards

DYNAMIT NOBEL AG
Werk Lültdorf
Technical Department



Sitz der Gesellschaft: 5210 5210 Trolsdorf • HRB 23 Amtsgericht Siegburg • Vorsitzender des Aufsichtsrates: Friedrich Karl Flick
Vorstand: Ernst Orasch, Vorsitzender: Peter Hoffmann, Hans E. Holzer, Gerd Krems, Axel Homburg (stellv.)

Energetika Ravne d.o.o Heat Exchanger

Slovenia

ENERGETIKA RAVNE, d.o.o.

Ravne RP
12.00/1029/RJ

**SUBJECT: INSPECTION OF TUBE HEAT EXCHANGER (2X) UHP FURNACE,
OPEN SYSTEM 40/30 °C**

Upon the agreement with Mr Petovar, we have concluded to inspect both tube heat exchangers on the secondary part of the UHP furnace.
The front and rear covers of both exchangers shall be disassembled.

PRESENT AT INSPECTION:

Petovar – SŽ Metal Ravne, d.o.o. JUH OTO
Oderlap, Vučko, Potočnik, Jamšek, Zapušek – Energetika Ravne, d.o.o.

ESTABLISHMENTS:

The inspected tubes were clean; there were no signs of lime scale accumulation.

The device for electronic softening is functioning well.

CONCLUSION:

We suggest that the device is purchased.



After Vulcan installation

Control of honey comb fill of
cooling tower

Vulcan Effects on Cooling Towers

USA

Data and Observations of the Effects of the Vulcan Electronic Descaler on Cooling Towers

Installation site:

The unit was installed on the 10 inch diameter line that feeds twin cooling towers (CT-1 and CT-2) at the FAMU/FSU College of Engineering.

Model installed:

Vulcan S250

**Objectives:**

The objectives are to prevent scale buildup on the cooling towers, remove the existing scale, eliminate the need for chemicals or time-consuming cleaning procedures, and to reduce energy costs.

History:

The maintenance for these cooling towers previously involved continuous injection of descaling chemical cleansers. The use of these cleansers was discontinued over a year prior to the installation of the Vulcan. In that time, the cooling tower flutes became encrusted with both scale and biofilm. Throughout the time period described below, there were no cleaning procedures in place with these cooling towers besides the treatment provided by the Vulcan.

Observations over time after the Vulcan Installation:

Between the time of the installation on July 16th and examination on August 1st, the green biofilm had begun to recede and gradually disappear. The next visit was about 3 weeks after the installation, on August 9th. At that point, the green biofilm had been further reduced and the scale deposits had begun to separate from the flutes in coin-sized flakes.

By August 20th, about a month after installation, the green biofilm had almost completely disappeared from the surfaces in contact with the Vulcan-treated water. The flakes of scale previously observed had fallen off in most places. The cooling tower flute surface area covered with scale deposits had been decreased by over 60%.

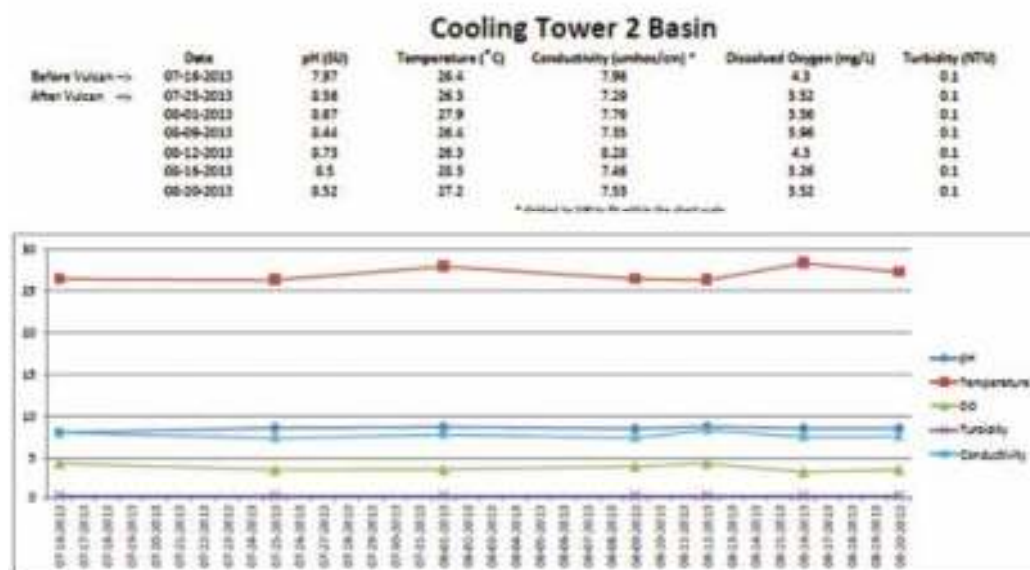
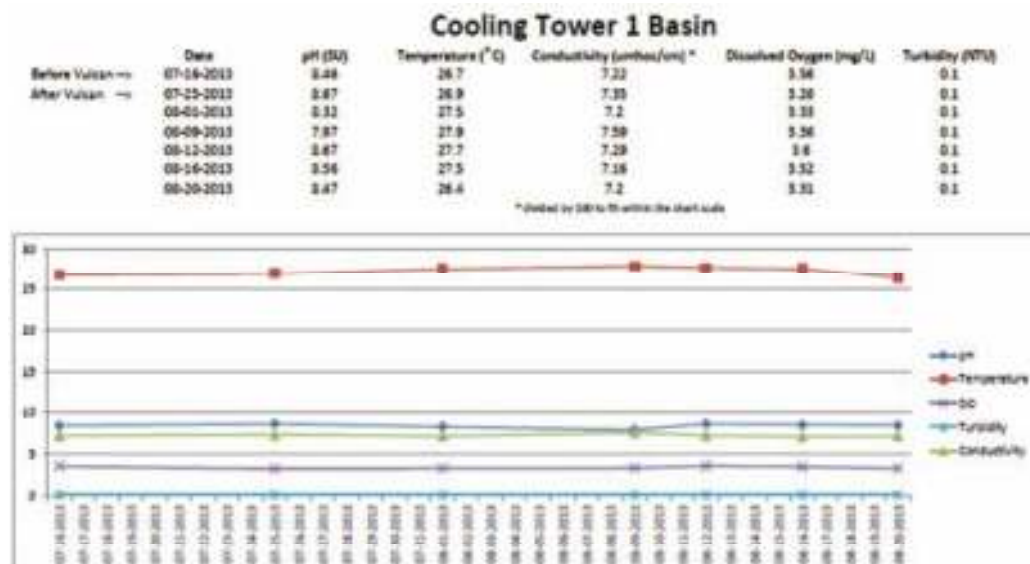
We are very optimistic about continued improvement with this application. In addition to these observations, water quality measurements were also obtained from each cooling tower and are summarized in the following charts.

Vulcan Effects on Cooling Towers

USA

Data and Observations of the Effects of the Vulcan Electronic Descaler on Cooling Towers

The Vulcan does not change the water quality beyond its affect on its propensity to cause scale buildup. As illustrated below, the pH, conductivity, dissolved oxygen level, and turbidity remained relatively constant during observation from before the installation to over a month after. Temperature is included, because of its affect on the other measurements and seems to correlate with the slight fluctuations observed.



Vulcan Effects on Cooling Towers

USA

Data and Observations of the Effects of the Vulcan Electronic Descaler on Cooling Towers



Vulcan S250 installed on a 10 inch diameter line that feeds twin cooling towers (CT-1 and CT-2)



This photo was taken of the inside of CT-1.

It illustrates clean flutes that are in constant contact with Vulcan-treated water and a few dry (untreated) areas that still have some remaining green biofilm.



The photographs above were taken of CT-1 about 3 weeks after the Vulcan was installed.



These photos were taken of CT-1 after about 6 weeks.

