

The GREEN alternative in water purification

Clearwater-Enviro.com

SCALE BLASTER®

The GREEN alternative in water purification



As Seen On



HGTV.com

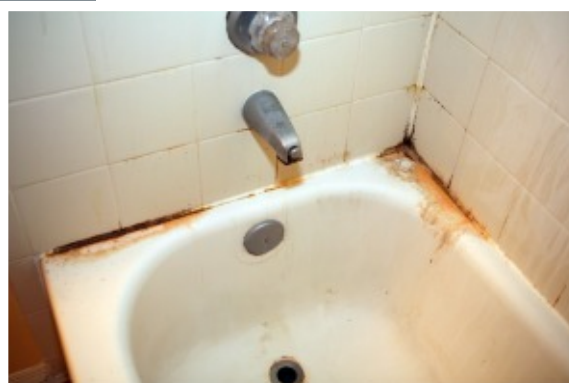


SCALE BLASTER®

The Water Softener Alternative

That hard water feeling. Soap that won't lather well...bad hair days...unsightly limescale deposits on faucets, sinks, and other plumbing fixtures... mold & mildew on shower curtains...shortage of hot water...decreased water pressure...bad tasting water...water heater breaking down again.

Sound familiar? Chances are you live in a hardwater area. Unless you have invested in an expensive and maintenance-prone water softener, you have taken your water for granted.



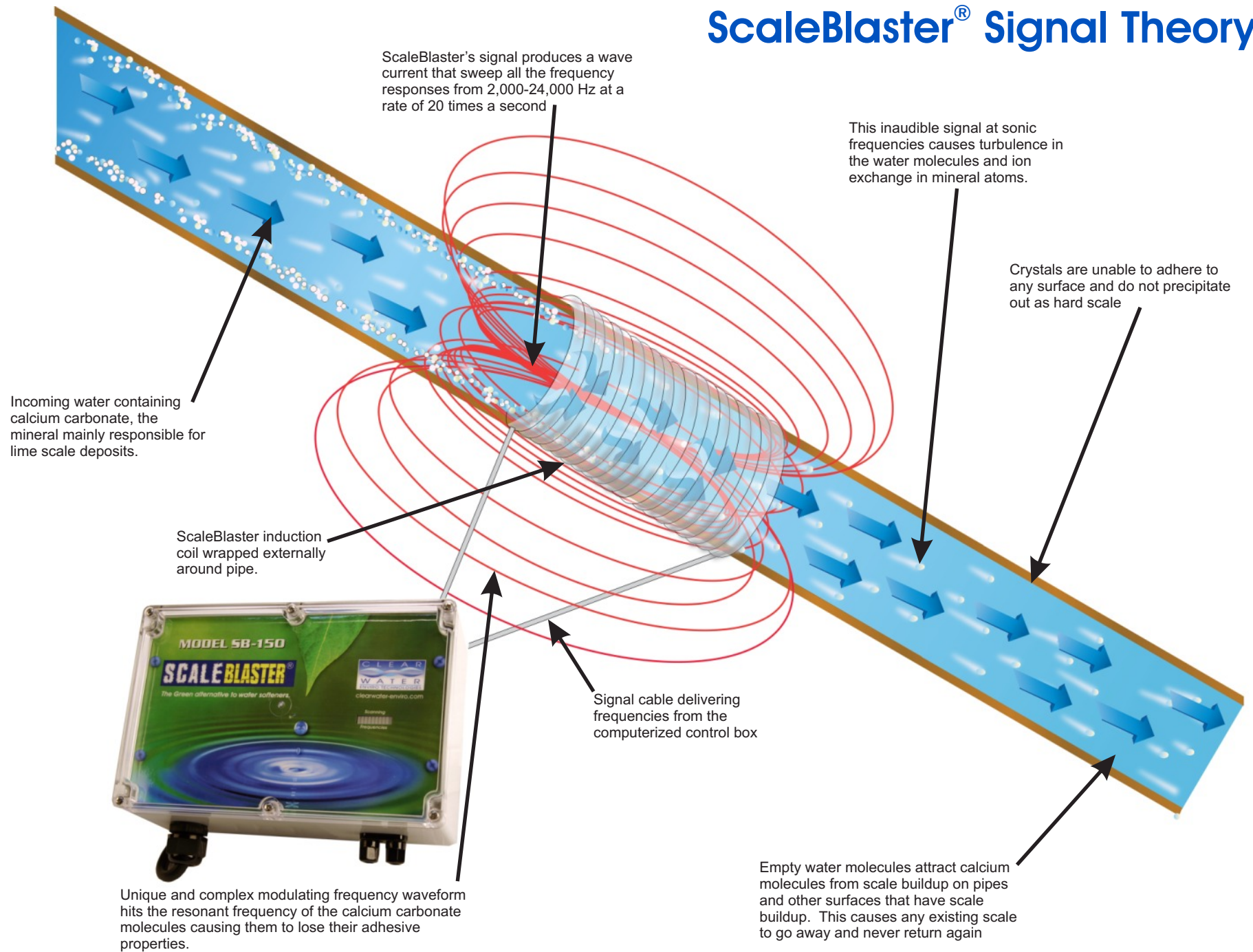
GROSS



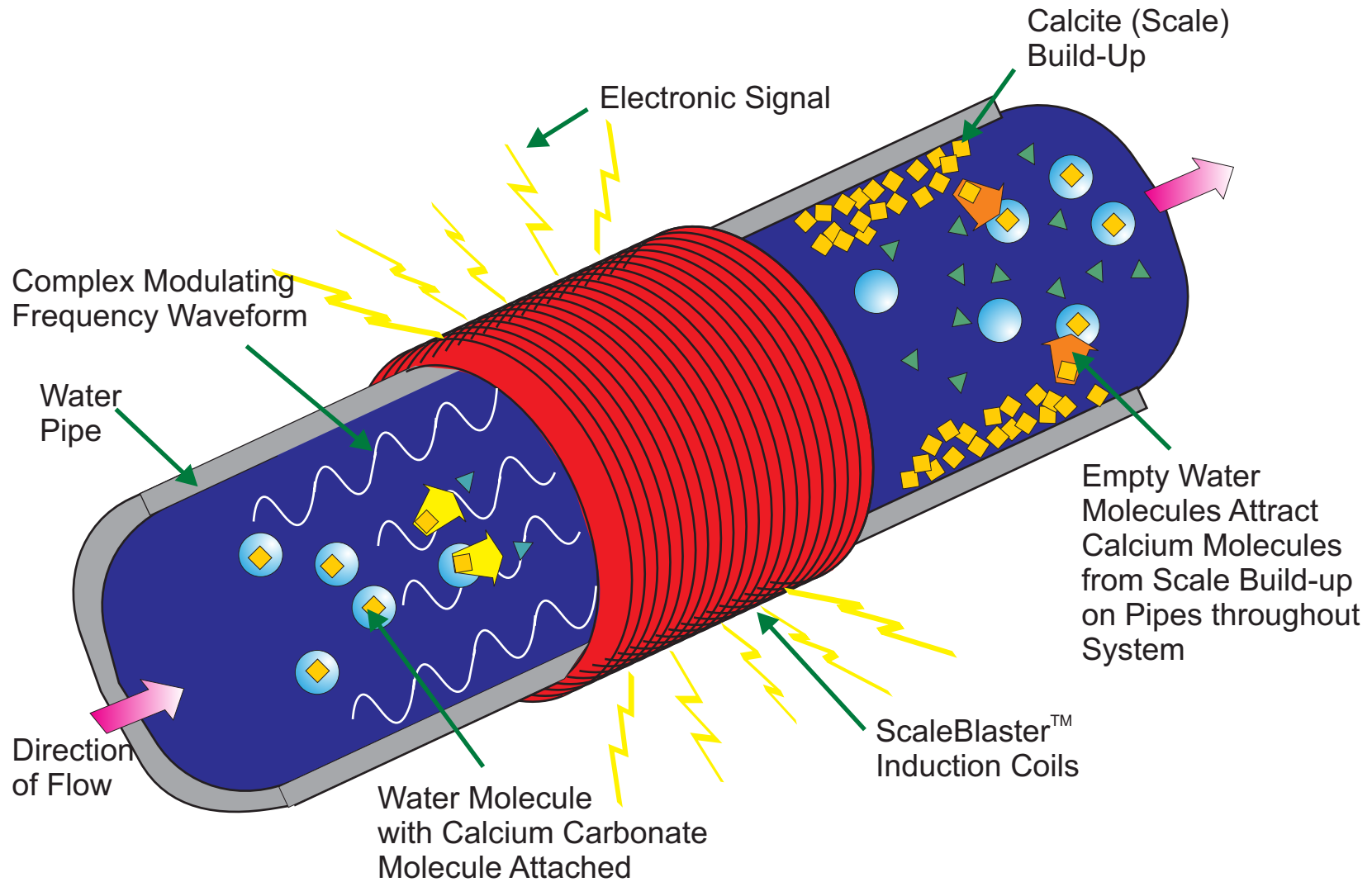


The ScaleBlaster unit is installed on the incoming water supply line as it enters the home. The unit may be installed indoors or outdoors.

ScaleBlaster® Signal Theory



ScaleBlaster® Molecular Theory



The **ScaleBlaster's** unit is composed of a signal cable that is wrapped several times around the pipe and an electronic unit that sends out a complex, dynamic current to produce extremely small, time-varying oscillating fields inside the pipe. The current that produces a oscillating field is known as Ampere's Law.

ScaleBlaster's signal produces a unique square wave current that sweeps all the frequency responses from 2,000 - 24,000 Hz at a rate of 20 times a second. When the strength of the oscillating field varies with time and changes direction, an induced current is produced inside the pipe, a phenomenon known as Faraday's Law of Induction.

As the induced electric field oscillates, all particles which have an electrical charge are affected by the induced field. This causes the unstable mineral ions to precipitate or collide with each other to the point where the calcium carbonate crystals grow until they become so large that there are no more surface charges left to stick to the pipe walls. As a byproduct of this "snowball" effect, freed water molecules become available to remove existing scale, molecule by molecule.

Ampere's Law

$$B = \mu_0 n I$$

Where B = resulting field vector

Faraday's Law of Induction

$$\int E \cdot ds = - \frac{\partial}{\partial t} \int B \cdot dA$$

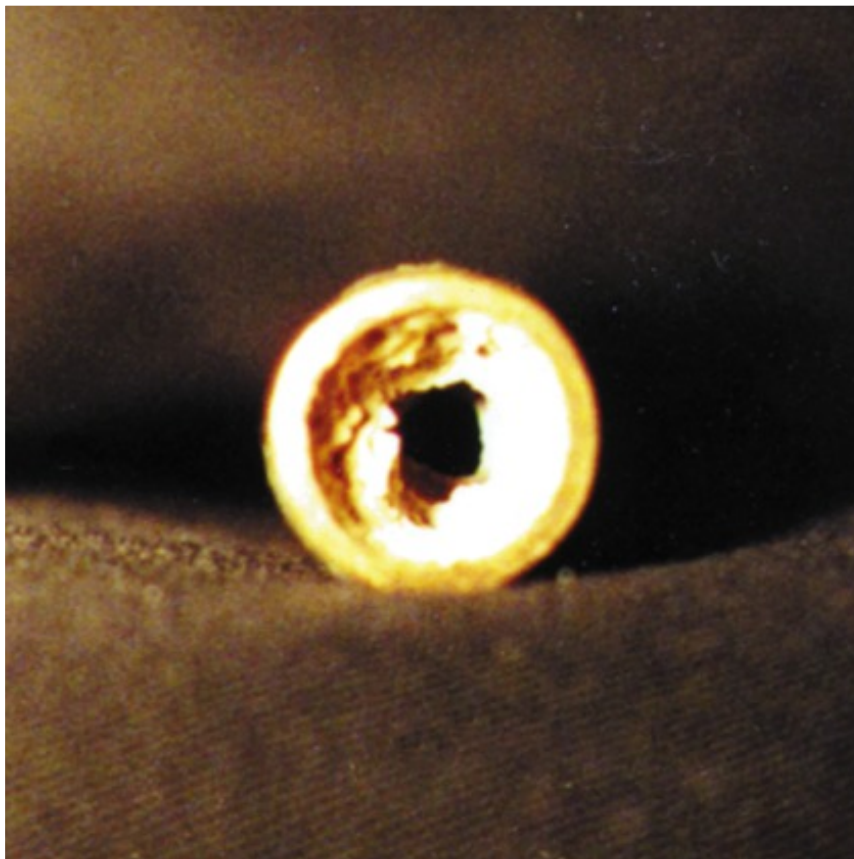
Where E = induced electric field vector

SCALE BLASTER[®]

The Water Softener Alternative

ScaleBlaster[®] is an innovative product that offers a true scientific breakthrough in technology. Its integrated circuitry system produces a unique and complex modulating frequency waveform that hits the resonant frequency of the calcium carbonate molecules causing them to lose their adhesive properties. This action prevents formation of limescale deposits and removes any existing scale. There is no maintenance, chemicals or softening equipment required.



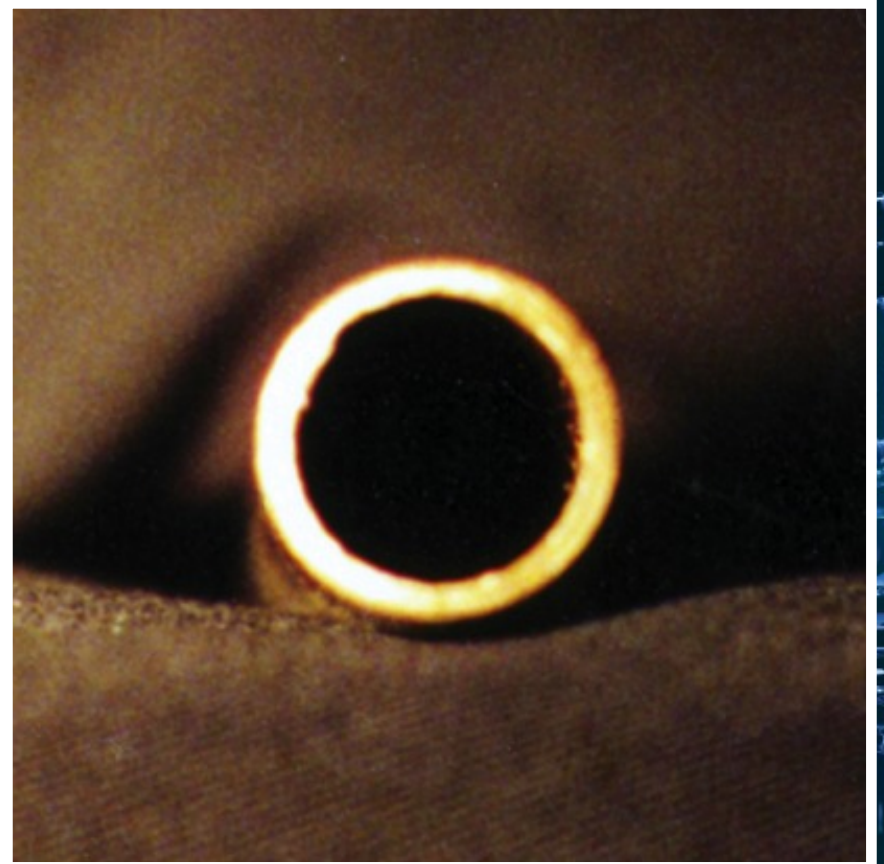


BEFORE

Actual photos taken
by
Centre Analytical Laboratories

SCALE BLASTER®

AFTER



Enjoy water that lathers and rinses off easier



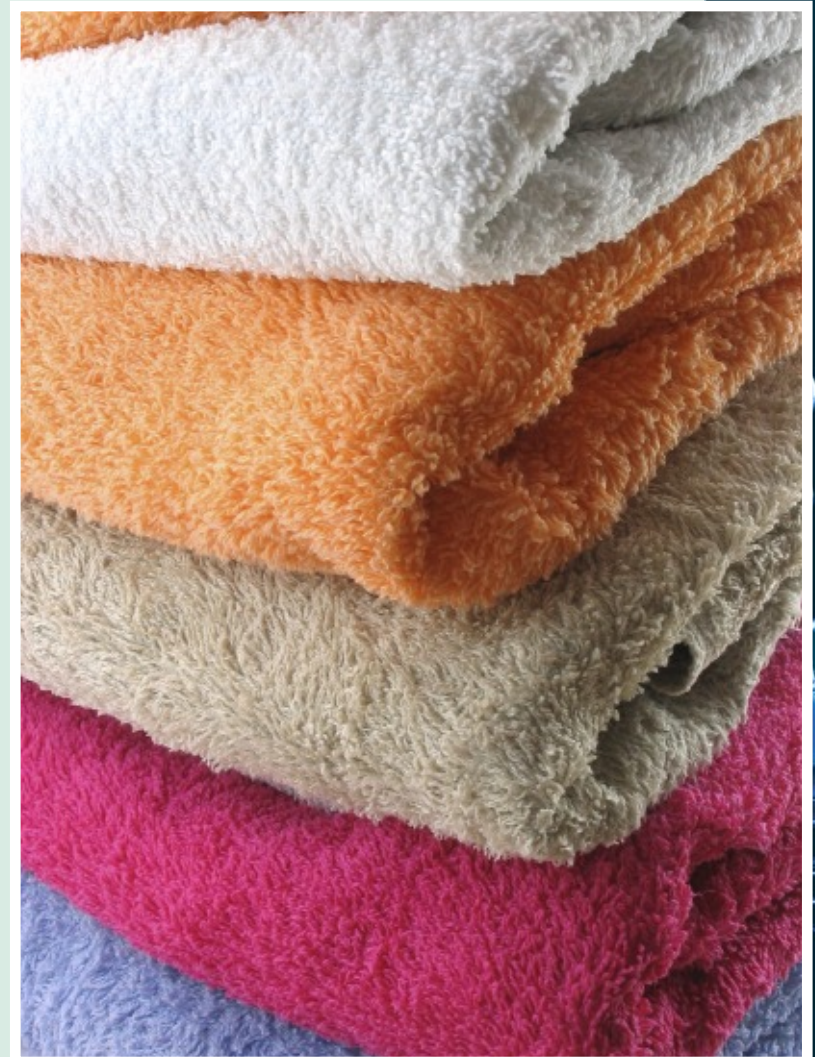


**Experience
“softer, silkier”
feeling water on
skin, hair and
clothes.
Sufferers of
eczema may
eliminate the
symptoms
without the
need of nasty
and expensive
creams.**

Eliminate lime scale deposits on sinks, faucets and shower heads.



Soap and detergent can be cut back 25% or more. Brighter, whiter and longer lasting clothes, towels & sheets. Your washing machine will thank you for helping it last longer, too!



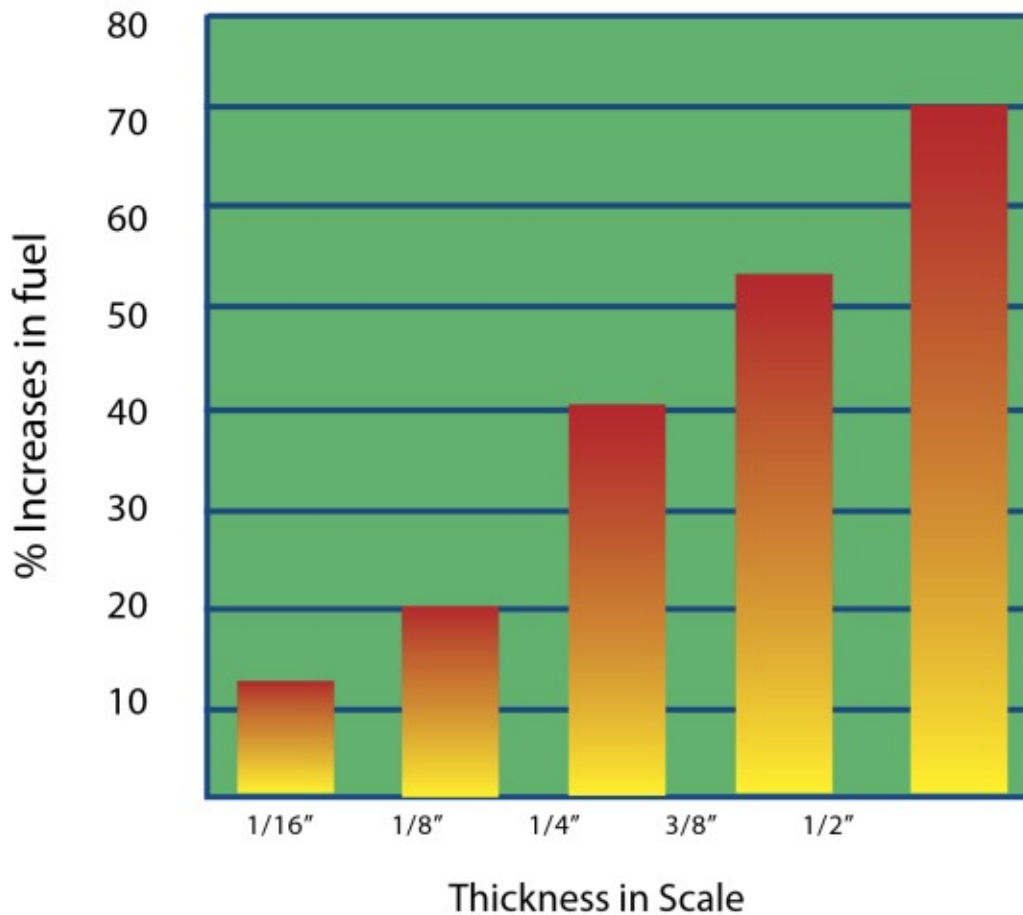
ScaleBlaster will reduce mold, mildew and corrosion due to hard water



Dishwashers will last much longer with scale deposits going away and the dishes and glasses will have less spotting and over all cleaner appearance.



Fuel Cost Due to Scale Build-up



The U.S. Department of Energy reports that just a 1/4" of scale deposits will increase your energy bill by 40%.



**Save \$\$\$ yearly
on water heater
efficiency as
scale is removed
and prolongs life
of water heater
& heating
elements.**

The new SB-150 and SB-175 models are especially designed for hard water areas and tankless water heaters. They are the most powerful residential units on the market and at an affordable price.

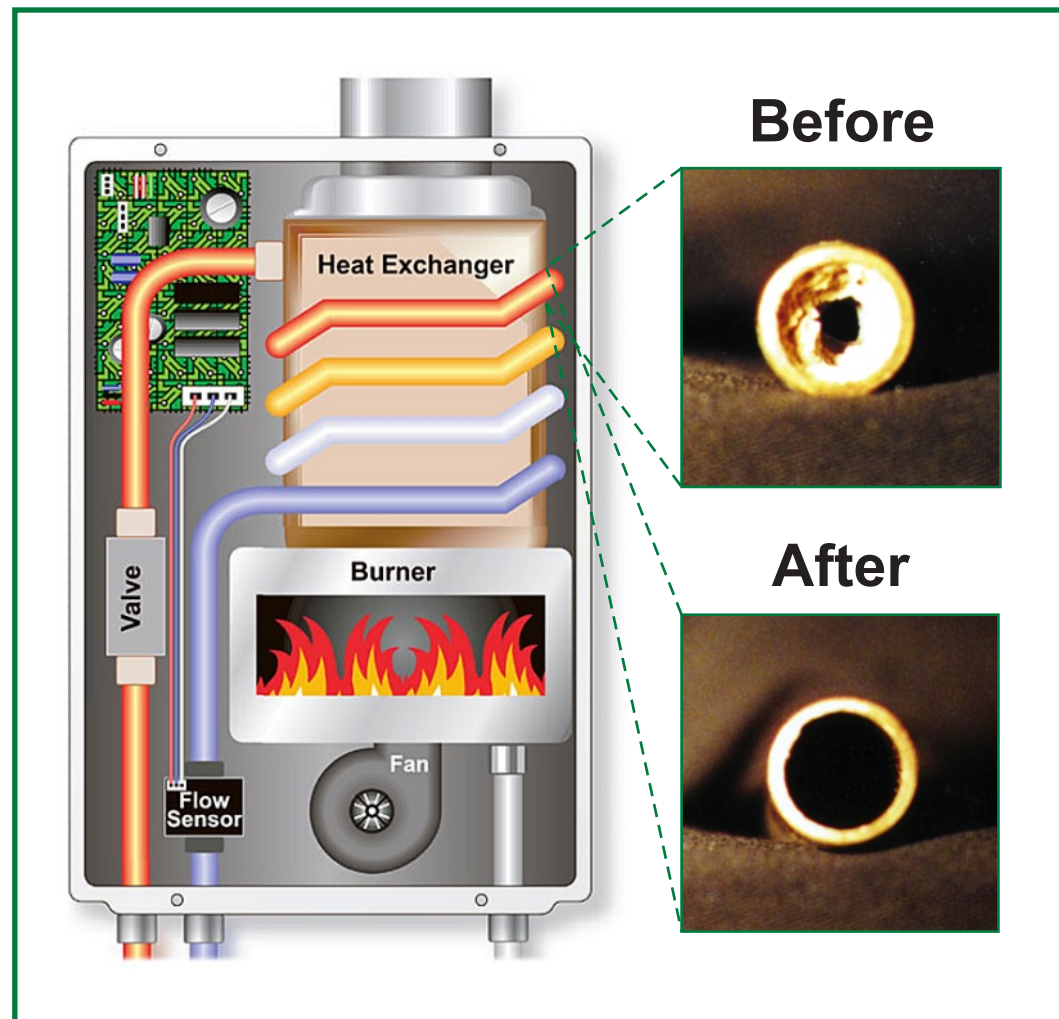
Model
SB-150

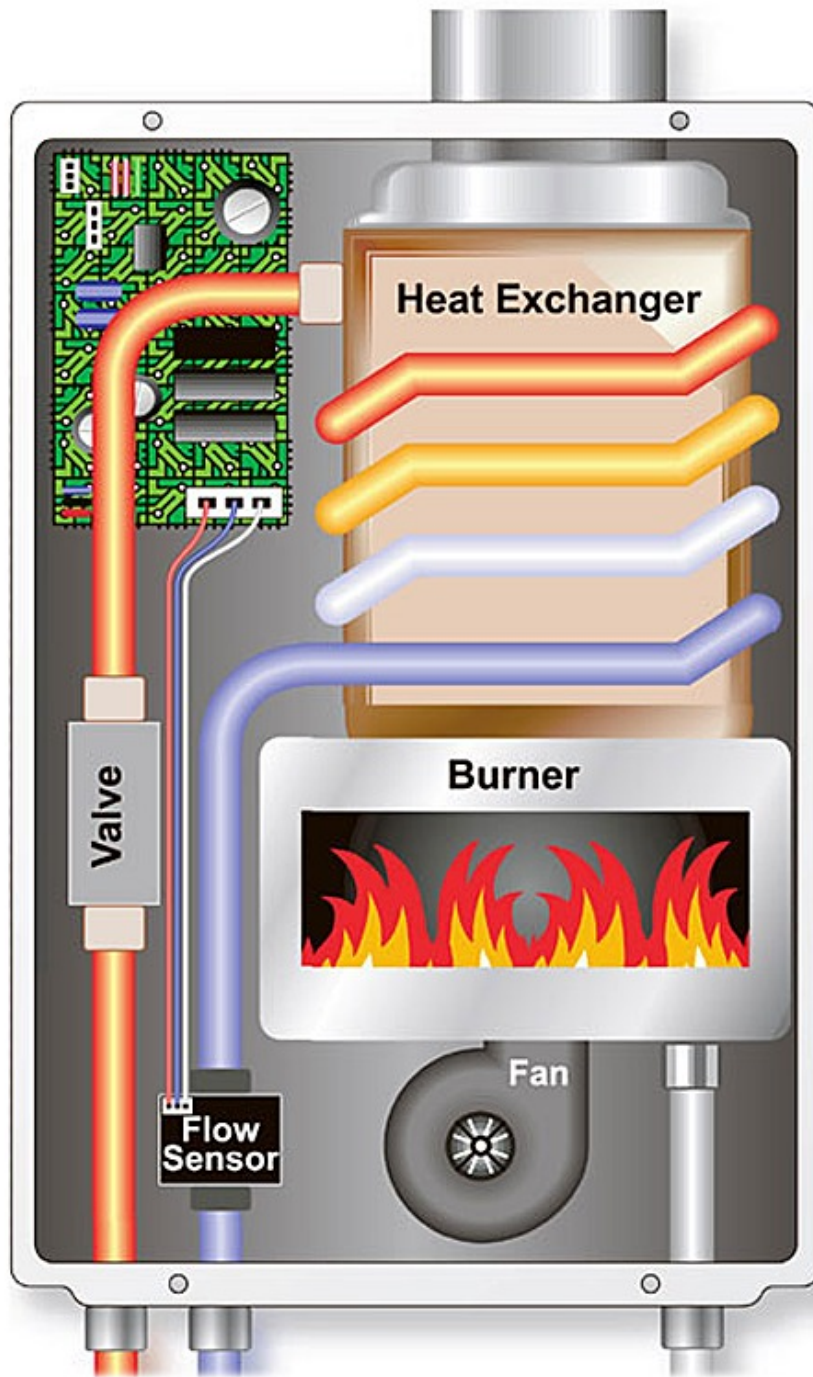


Model
SB-175



All tankless water heaters will eventually scale up in the exchanger. The only other options are expensive and maintenance prone water softeners or the continuous replacement of expensive submicron filters.





The tankless water heater will operate much more efficiently, become maintenance free due to limescale buildup, and help keep the warranty of the equipment in tack. It will also extend the life span of the unit due to hard water.

In today's world, people like things that are maintenance-free, as people seem to be busier and don't have much spare time.

Water softeners waste water and require corrosive bags of salt to operate.



Water Softeners

SCALE BLASTER®

Expensive to purchase

Less expensive to purchase

5-10 year lifespan

20-25 year lifespan

Requires maintenance

Never requires maintenance

Uses lots of floor space

Mounts on a wall

Requires delivery of salt or chemicals

Requires no salt or chemicals

Harmful for people on salt restricted diets

Safe for people on salt restricted diets

Intrusive to the water

Non-intrusive to the water

Increases water and sewer bills greatly

Does not require any additional water usage

Discharges chlorides into waste stream

Environmentally "green" product

Makes Skin feel dry

Makes skin feel softer

Makes water feel slippery

Makes water feel "Silkier"

Soap suds difficult to remove

Soap suds wash away easily

Water softeners exchange beneficial minerals in your water for sodium. ScaleBlaster provides a healthy alternative to water softeners.



People on salt restricted diets should not drink or shower in water from a water softener, as this will greatly increase your salt intake.



**Enjoy safer,
better tasting
water by
removing the
scale in the
pipes that
breed
bacteria.**





A revolution in water purification

SCALEBLASTER®

The water softener alternative

**Residential Electronic Descaler
Model # SB-150**



Premium Model — up to 1 1/4" Pipe

New Going Green Model

**SB-150 ELECTRONIC DESCALER
SPECIFICATION SHEET**

PIPE SIZE CAPACITY: up to 1 1/4" pipe size diameter.

Designed for residential use only.

PIPE TYPE: PVC, PEX, copper or any non-ferrous based pipe.

INPUT VOLTAGE/CURRENT: 100 to 240 VAC, @ < 500mA

INPUT POWER: < 15 Watt

OUTPUT VOLTAGE: 5V (open circuit).

OUTPUT CURRENT: 1000 mA

INPUT FUSE: 1Amp, 250VAC, 5x20mm, fast acting (F1 on pcb)

(Radio Shack part # 270-1063)

OUTPUT FUSE: 4Amp, 250VAC, 5x20mm, slow acting (F2 on pcb)

(Radio Shack part # 270-1066)

DESCALING METHOD: The control box supplies a square wave signal to a coil of wire that is wrapped around the pipe. The signal is changed anywhere from 1,000 to 20,000 times a second, producing a modulating frequency waveform that hits the resonant frequency of the calcium molecules causing them to lose it's adhesiveness.

ENCLOSURE DIMENSIONS: 9.45" x 6.30" x 3.54"

ENCLOSURE SPECS: made out of high-impact ABS molded plastic, NEMA 4X rated, UL approved. Mounting brackets included. Weatherproof enclosure.

SIGNAL CABLE: 18 gauge, single stranded wire, 40 feet long.

WARRANTY: 10 years parts and labor.

SHIPPING WEIGHT: 3.5 lbs.

CARTON DIMENSIONS: 12" x 11" x 6"



A revolution in water purification



The water softener alternative

Residential Electronic Descaler Model # SB-175



Super Deluxe Premium Model — up to 1½" Pipe

New Going Green Model

SB-175 ELECTRONIC DESCALER SPECIFICATION SHEET

PIPE SIZE CAPACITY: up to 1 1/2" pipe size diameter.

Designed for residential use only.

PIPE TYPE: PVC, PEX, copper or any non-ferrous based pipe.

INPUT VOLTAGE/CURRENT: 100 to 240 VAC, @ < 500mA

INPUT POWER: < 15 Watt

OUTPUT VOLTAGE: 5V (open circuit).

OUTPUT CURRENT: 1350 mA

INPUT FUSE: 1Amp, 250VAC, 5x20mm, fast acting (F1 on pcb)

(Radio Shack part # 270-1063)

OUTPUT FUSE: 4Amp, 250VAC, 5x20mm, slow acting (F2 on pcb)

(Radio Shack part # 270-1066)

DESCALING METHOD: The control box supplies a square wave signal to a coil of wire that is wrapped around the pipe. The signal is changed anywhere from 1,000 to 20,000 times a second, producing a modulating frequency waveform that hits the resonant frequency of the calcium molecules causing them to lose it's adhesiveness.

ENCLOSURE DIMENSIONS: 11.75" x 9" x 3.5"

ENCLOSURE SPECS: made out of high-impact ABS molded plastic, NEMA 4X rated, UL approved. Mounting brackets included. Weatherproof enclosure.

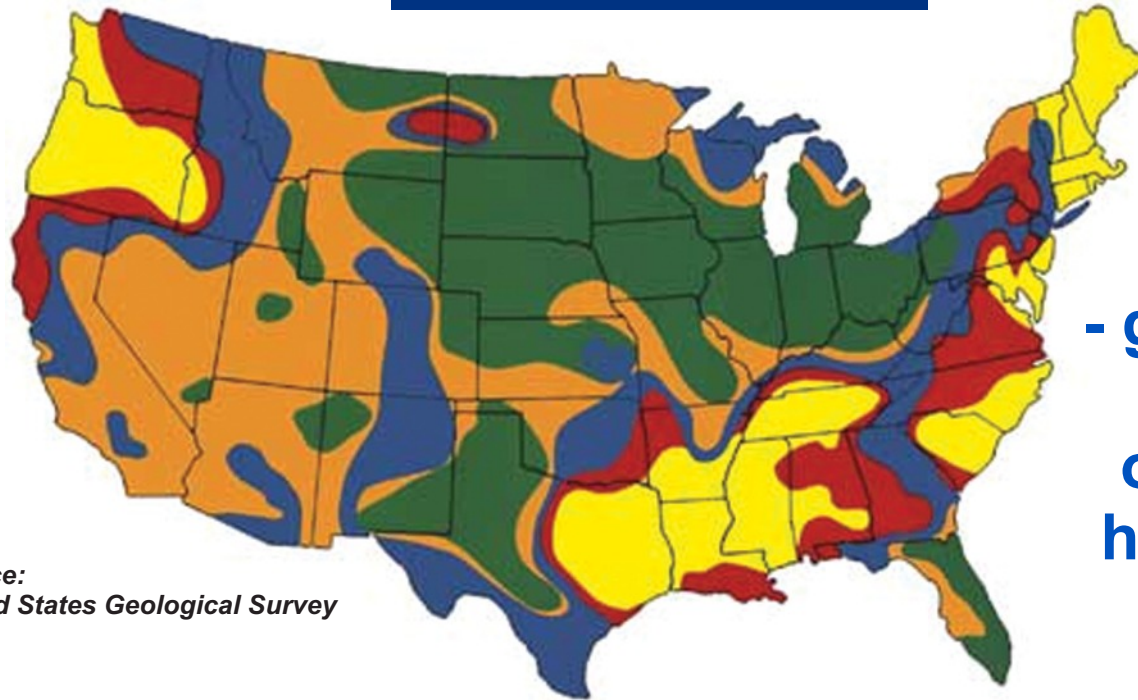
SIGNAL CABLE: 18 gauge, single stranded wire, 40 feet long.

WARRANTY: 10 years parts and labor.

SHIPPING WEIGHT: 5 lbs.

CARTON DIMENSIONS: 15.25" x 14.25" x 4"

Residential **SCALEBLASTER**® Models



Source:
United States Geological Survey

- guideline
chart
of water
hardness
in the
USA

SB-175

Rocklike Hard ■ Over 25 gpg / 428+ (ppm)

SB-150

Extremely Hard ■ 14 to 25 gpg / 240 -427 (ppm)
 Very Hard ■ 10 to 14 gpg / 171 - 239 (ppm)
 Hard ■ 7 to 10 gpg / 120 - 170 (ppm)

SB-125

Moderately Hard ■ 3 to 7 gpg / 51 - 119 (ppm)
 Slightly Hard ■ < 3 gpg / under 50 (ppm)

This map is only intended as a basic guideline, and does not project perfect readings in all areas. Including those on well water, which is generally much harder than city water. Consult your local water authorities for correct readings.

SCALE BLASTER®

The chemical & maintenance-free alternative

Absolutely no maintenance required. No filters to change, no batteries, no bags of salt to add. No costly repairs. The unit has a shelf

life of about 25 years!

The units are easy to install and are non-invasive - there is no cutting into the pipes!

**Model
SB-150**





Going GREEN

**as
an
added
value.**

**ScaleBlaster will save you money in energy,
water and sewer bills by as much as 20% while
at the same time helping our environment by
providing a "green" alternative to water
softeners.**

Water softeners discharge brine into our water system, contributing to the pollution of our environment.



Lime scale deposits can cause serious problems by restricting the water flow in your pipes and reduce thermal efficiency.





The Water Softener Alternative

There are 20 models of ScaleBlaster® available to handle any size operation.

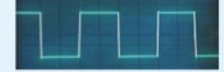
From a small residential home to 40 inch diameter pipes in large industrial applications.



SB-50
economical residential model /
indoor installation
Max pipe size: 1" 65 mA of power



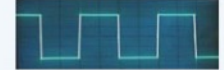
SB-1400
industrial model / outdoor installation
Max pipe size: 14" (8" steel pipe)
5 amps of power



SB-125
premium residential model /
outdoor installation
Max pipe size: 1 1/2" 200 mA of power



SB-1800
industrial model / outdoor installation
Max pipe size: 18" (12" steel pipe)
7.5 amps of power



SB-200
commercial model /
outdoor installation
Max pipe size: 2" 400 mA of power



SB-2000
industrial model / outdoor installation
Max pipe size: 20" (14" steel pipe)
10 amps of power



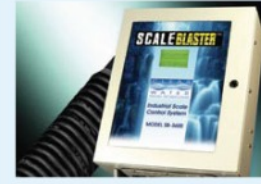
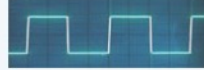
SB-300
commercial model /
outdoor installation
Max pipe size: 3" 700 mA of power



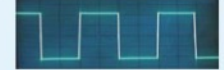
SB-2800
industrial model / outdoor installation
Max pipe size: 28" (20" steel pipe)
20 amps (10 x 2 channels)



SB-400
commercial model /
outdoor installation
Max pipe size: 4" 800 mA of power



SB-3600
industrial model / outdoor installation
Max pipe size: 36" (24" steel pipe)
30 amps (10 x 3 channels)



SB-600
commercial model /
outdoor installation
Max pipe size: 8" 1600 mA of power



SB-4000
industrial model / outdoor installation
Max pipe size: 40" (26" steel pipe)
40 amps (10 x 4 channels)



SB-1200
industrial model /
outdoor installation
Max pipe size: 12" (6" steel pipe) 3 amps of power



SBR-800
residential model / indoor installation
Maximum pipe size: 1 1/2" pipe
Uses radio wave frequency For steel pipes only



SCALE BLASTER®

The chemical & maintenance-free alternative

Commercial Applications

Aerators	Dishwashers	Heat exchangers	Lime dosing plant	Restaurants
Agriculture	Electric elements	Hospitals	Lumber	Schools
Bakeries	Engines water cooling systems	Hot water systems	Manufacturing facilities	Slaughterhouses
Boilers/heating equipment	Evaporators	Hotels/motels	Milk processing	Slurry process lines
Beverage vending equipment	Evaporative condensers	Humidifiers	Medical/dental	Spray systems
Calorifiers	Filtration equipment	Ice-making machinery	Mushroom farms	Steamers
Car washing equipment	Fitness centers/spas	Induction furnaces	Nozzles	Swimming Pools and Spas
Chillers	Gardening centers/nurseries	Injection mold machinery	Nursing homes	Waste water treatment
Condensers	Golf courses	Irrigation	Poultry farms	Water treatment
Cooling towers/HVAC	Hairdressers	Laundry & dry cleaning industry	Printing	Well water
			Pumps	
			Refiner plates	





Cooling Towers

Huge savings in maintenance, biocide chemicals, labor and water usage. ScaleBlaster reduces scale buildup, bacteria, Biofilm, corrosion and algae blooms. It will reduce makeup water/ blow downs substantially, resulting in huge water savings. Increase life of equipment and it will lower energy costs by about 10%.

Chillers/Condensers/Air handlers

Lime scale deposit control on heat exchanger tubes and surfaces resulting in energy savings of 5-7%.

Boilers

Huge savings in chemicals and labor maintenance. Reduces scale formation on boiler fire tubes, condensation tank, pumps, pipes and valves. Lowers energy costs by 25% and extends equipment life.

Water heater tanks

Water heaters work more efficiently resulting in huge energy savings. Scale control on heating coil and tank.

Dishwashers

Lime scale buildup in the dishwasher lines and on glassware and dishes will be reduced.

Steamers

Your steamers will require little or no maintenance for scale build-up.

Ice Machines

Scale deposits can cause cubes to be cloudy and clogs in the water flow. ScaleBlaster reduces filter clogs, Biofilm and contaminants. Maintenance and downtime are also reduced and equipment lasts longer.

Laundry

Scale deposit control in steam ironing machines, washing machines. You will typically cut detergent use in half. Cloths and towels will feel softer, look brighter and last longer, making your clients feel more pampered.

Drinking water, coffee machines, soda dispensers

The water will taste much better because the breeding ground of bacteria (scale in water pipes) is gone. By keeping calcium in the water, coffee and cappuccino will taste better.

Housekeeping/general cleaning

Huge savings are realized in all phases of cleaning including the bathrooms and in the kitchen because there is less scale buildup in toilets,

showers, nozzles and faucets. Reduced labor and savings in cleaning chemicals benefit your bottom line.

Aerators

Aerators will no longer clog up with scale formation, resulting in the elimination of nuisance cleaning and replacement.

Plumbing system

Your entire building's plumbing system will be descaled without any chemicals or re-plumbing. This results in huge savings in heating costs. If the plumbing ever needed replacement in the building, the cost would be astronomical.

Swimming pools and hot tubs

Lime scale deposit in the filtration equipment and pool walls will be eliminated.



SCALE BLASTER®

The chemical & maintenance-free alternative

Industrial Applications

Agricultural Applications
Aluminum Applications
Aquarium Applications
Automotive Industry
Boilers
Breweries
Car Washing Equipment
Cooling Towers
Chemical Manufacturing
Dairy Products
Dye Manufacturing
Fabric Manufacturing

Food Processing
Geothermal Power Plants
Health Care
HVAC
Injection Molding
Maritime Industry
Metal Milling & Glass Finishing
MTBE Pollution Remediation
Oil Wells
Optical Industry
Paint Manufacturing
Pharmaceutical Manufacturing

Pollution Remediation
Polymer Production
Poultry Production
Pulp & Paper Mills
Power Generation
Rubber & Tire Industry
Steel Industry
Sugar Mills
Textile Manufacturing
Trucking Industry
Waste Water Treatment
Water Treatment



SCALE BLASTER®

MineralPURE®

A Sustainable Solution for Cooling Tower Water Treatment



NO Chemicals  **NO Salt**  **NO Maintenance**



ScaleBlaster.com

Eliminate toxic chemicals - Save on energy and water costs

Sustainability is our goal

Achieving sustainability will enable the Earth to continue supporting human life as we know it. There is abundant scientific evidence that humanity is living in an unsustainable environment. Changes to the balance of natural cycles have had a negative impact on life. A major contributor has been the use of hazardous chemicals. **ScaleBlaster's** mission is to provide an effective, ecological and economical way in obtaining the sustainability goals.



ScaleBlaster is the answer

ScaleBlaster is a proven sustainable water treatment alternative. Achieved through its futuristic like technology and considerable engineering developments over the years, the **ScaleBlaster** water treatment system offers a chemical-free alternative that will substantially lower your operating costs as compared to using chemicals – while “Going Green” at the same time! Huge savings will be realized in chemical savings, energy and water usage. **ScaleBlaster** has been successful at this for 15 years now.

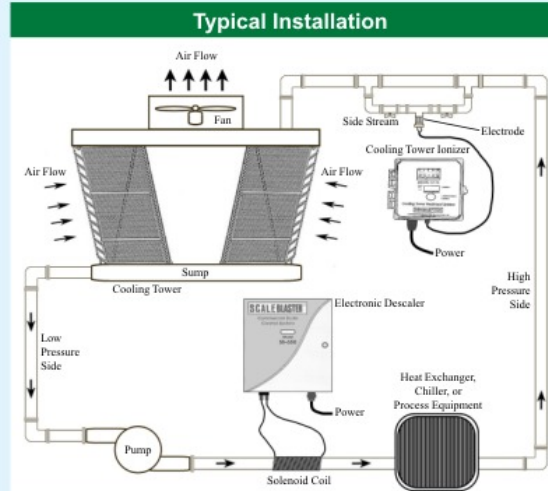


Introducing the Chemical-free Treatment System



ScaleBlaster – The Electronic Descaling System

Produces a complex modulating frequency waveform that hits the resonant frequency of the calcium molecules, causing them to lose their adhesive properties. Scale deposits are removed



Mineral Pure – The Copper/Silver Ion Generator

Digitally controlled microprocessor produces copper and silver ions from a scientifically developed set of electrodes. These ions kill algae, Biofilm, bacteria and viruses.

Sustainable Results, Benefits & Savings

RESULTS

- Removes existing scale & prevents new scale formation
- Algae, Biofilm, fungi & other microorganisms are virtually eliminated
- Increase cycles of concentration to 6 or more- significantly reducing “bleed off”
- Water clarity improves
- Bacteria counts reduced
- Reduced corrosion & pitting from bacteria

BENEFITS

- Greatly reduce or eliminate chemical usage
- Ease of liability, safety, regulatory, & EPA concerns
- Reduce overall cooling tower maintenance expenses
- Eliminate scale and Biofilm as a breeding ground for harmful bacteria – including Legionnaire's Disease
- Eliminate fouling of the chiller

SAVINGS

- In chemical costs alone, the savings are substantial. Chlorine, biocides, acids & phosphates & similar compounds may be eliminated
- Chemical storage, regulation and compliance issues
- Huge energy savings from improved heat transfer as a result of scale and Biofilm elimination
- In “Green” building tax credits
- Huge savings in water usage and disposal fees
- Extends life of capital equipment and downtime

