

# SBC

## Scale Bacteria Controller



**GRISWOLD FILTRATION**

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# Applications

- Cooling Towers
- Heat Exchangers
- Condensers
- Evaporators



# Advantages • Benefits

- Non-chemical
- Prevents and removes scale
- Controls bacteria & biofilm
- Non-corrosive environment
- Reduces turbidity
- Easy to use and maintain
- Lowers energy consumption
- Water discharge is safe & clean
- Safe for all plastics, metal and rubber
- Reduces maintenance

# Features

- Microprocessor controlled
- Four independent coils
- Strongest signal strength available
- Low energy consumption (about 100 watts)
- Self-tuning AutoSeek™ function
- Combines variable frequency AC signals with DC electromagnetic pulses
- NEMA 4 weatherproof Reaction Chamber & Driver
- Universal power supply 100 to 240 VAC at 50 - 60 Hz

# Savings

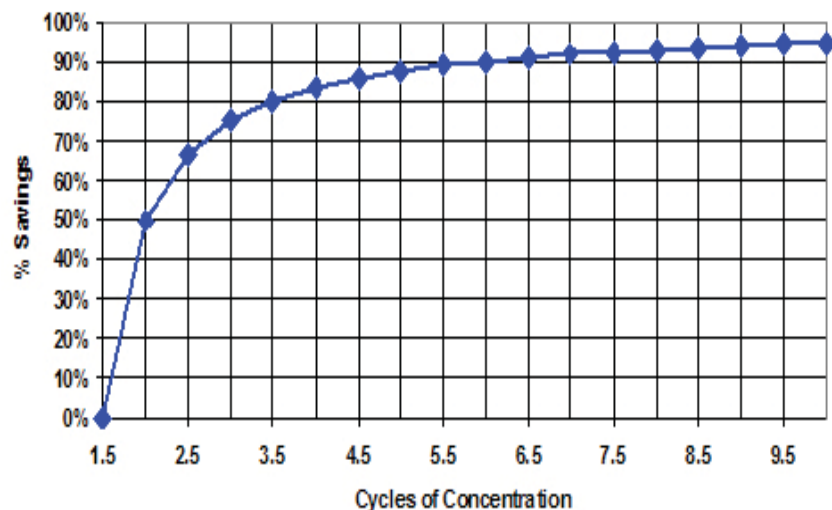
- Prevents scale and eliminates biofilm while providing non-corrosive environment
- Lowers operating cost
- Reduces energy consumption

Scale Thickness	SBC	% Savings
1/32"	No Scale	8.5
1/16"		12.4
1/8"		25
1/4"		40

- Chemical reduction or elimination



- Possible Blowdown Water Savings With Higher Cycles



*Technical Details Available on Request*

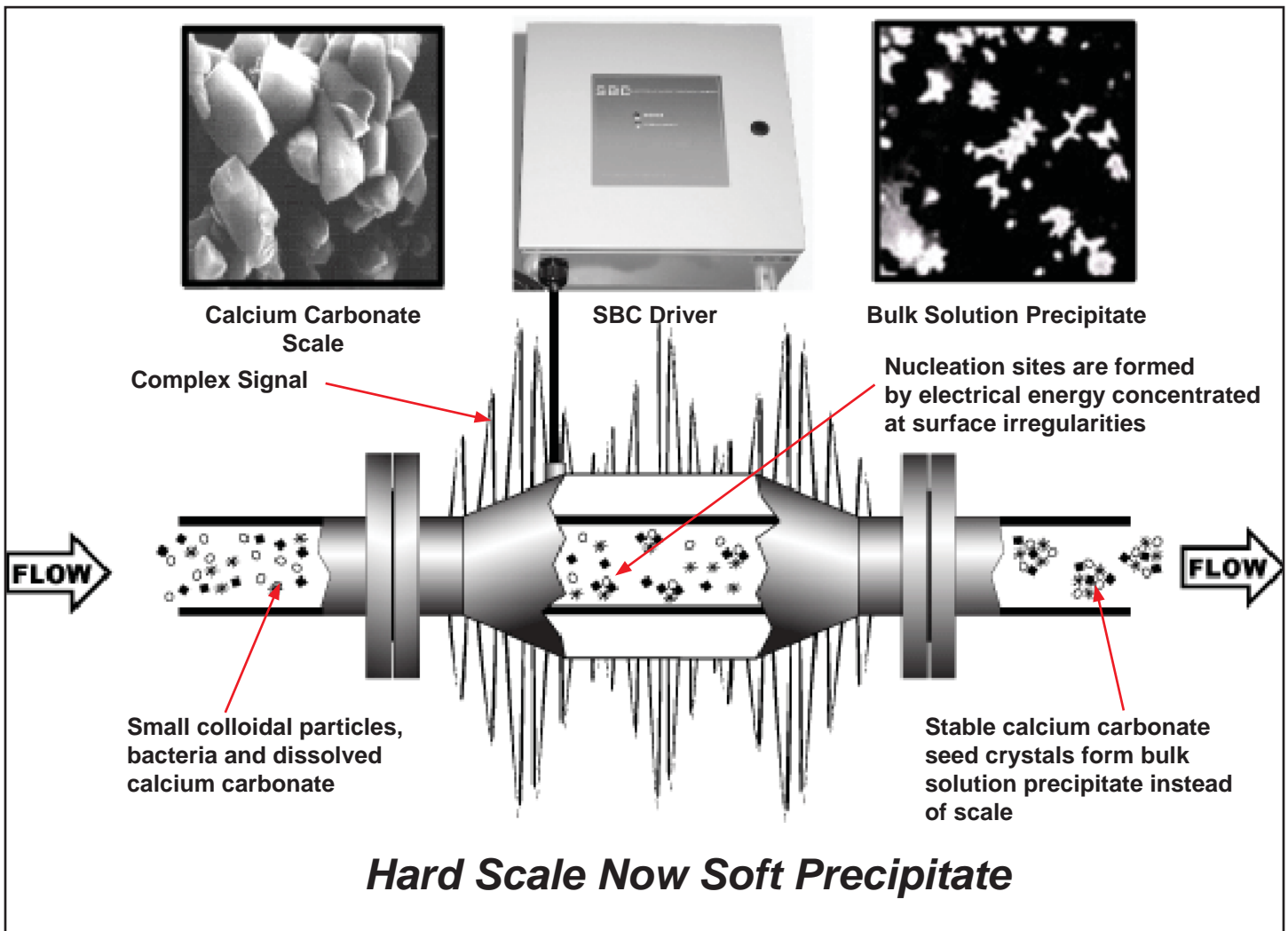
## ***The SBC Provides Repeatable & Measurable Results***

The SBC Driver generates complex AC signals and DC pulses that are applied to the water via a series of four induction coils housed in a weatherproof Reaction Chamber. The induced electrical currents create “seed crystals” in the flowing water. These crystals provide preferential sites for additional solids precipitation, thus protecting the heat transfer surfaces from scale deposits. The induced electrical currents also significantly reduce bacterial growth and eliminate biofilm in treated systems.

Corrosion is controlled indirectly by several mechanisms:

1. Biologically induced corrosion is reduced by eliminating biofilm in the system.
2. Elimination of oxidizing biocides provides a less corrosive environment.
3. By effectively controlling scale formation, the SBC allows the use of calcium carbonate as a natural corrosion inhibitor.

SBC applications are being constantly evaluated and improved by the Griswold Electronic Water Treatment Laboratory equipped with advanced instrumentation, laboratory cooling tower and test heat exchanger.



# Examples

Before



**Food Processor  
Evaporative  
Condenser**



After



**Injection Molding  
Cooling Tower**



**Marine  
Freshwater  
Evaporator**



**Bakery  
Evaporative  
Condenser Float  
Valve**



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