



# Scale & Corrosion Protection

**Energy-Free • Chemical-Free**



# Quality Built



# Certified to the Highest Standards



# How Does It Work?

- Hard/alkaline water flows over internal surfaces creating an electrostatic charge
- Electrostatic charge forces hardness (calcium and magnesium) to react with the alkalinity in the water causing carbonate scale particles precipitate
- The carbonate particles pass through the system and are not able to deposit as scale on piping, valves, fixtures and heat exchange surfaces
- The bulk water is now unsaturated in hardness which allows existing scale deposits to dissolve and be removed from the entire system
- The all happens without the need for electricity or maintenance



# Threaded Models



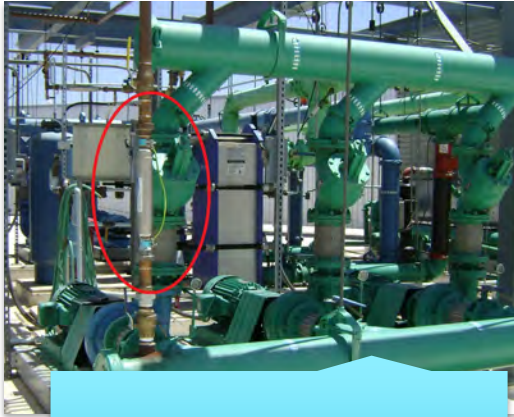
# Flanged Models



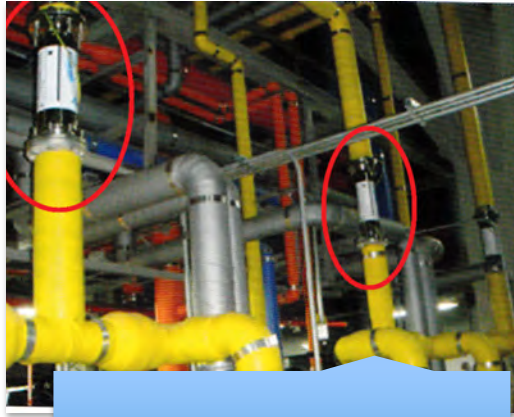


# Extensive

## Installed Base – Over 300,000 since 1990



SB-50



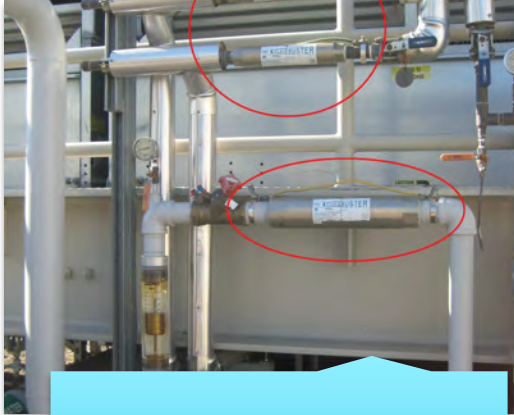
2 SB-80



SB-100

# Extensive

## Installed Base – Over 300,000 since 1990



SB-40 and SB-50



SB-150x2



SB-200 pre-install



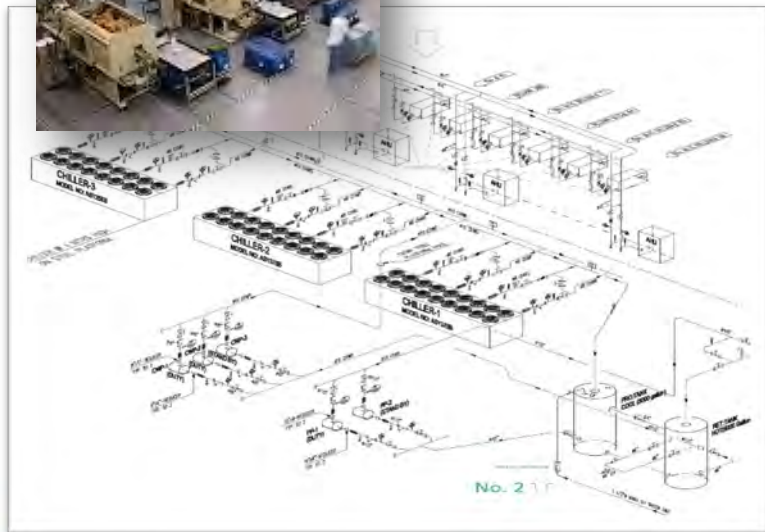
# Trusted by Major Companies



# Case Studies

- ❖ **RD Plastics** – Illinois, USA
- ❖ **Hachez-Chocoladen** - Bremen, Germany
- ❖ **Dong Boo Chemical Co.** - Multiple Facilities, South Korea
- ❖ **VA Hospital** – Houston, TX, USA
- ❖ **Continental Teves** – Gifhorn, Germany

# RD Plastics - USA



## Water System Challenges

- Closed circuit cooling - using city water/storm water blend and softened to 10°dH
- Consumes 25,000 gal. of fresh water & salts weekly

## Solution

- **ScaleBuster®** units for each HX (entry) / tool
- **ScaleBuster®** treats water entering the cooling circuit & side stream unit to remove precipitated hardness

## Results

- Lime-free tool cooling ducts & discharge locations
- Less corrosion in the tools
- **ScaleBuster®** ROI achieved in <2 years



# Hachez-Chocoladen - Germany



## Water System Challenges

- Scaling residue on casting molds coming out of the huge “dishwasher” machine
- Caused chocolate to appear dull

## Solution

- **ScaleBuster®** conditioner (SB100-16) installed upstream of “Dishwasher” to prevent scale residues on the molds

## Results

- Improved look of chocolate – shiny vs. dull
- Additional **ScaleBuster®** conditioners added to protect rollers and nozzles in different parts of the process

# Dong Boo Chemical Co. – South Korea

Before



After



## Water System Challenges

- Factory used electrode holders for cooling the furnace
- Avg. Replacement: 7.8 holders per month

## Solution

- ScaleBuster® units installed on main inlet pipes (one SB150 and 2 x SB200s )

## Results

- Replacement rate of the holders was reduced by over 50%



# Houston VA Hospital – USA



## Water System Challenges

- Cooling water causing scale, corrosion & biogrowth
- Reduced efficiency, leaks, shortened equipment lifespan; hazardous chemicals required

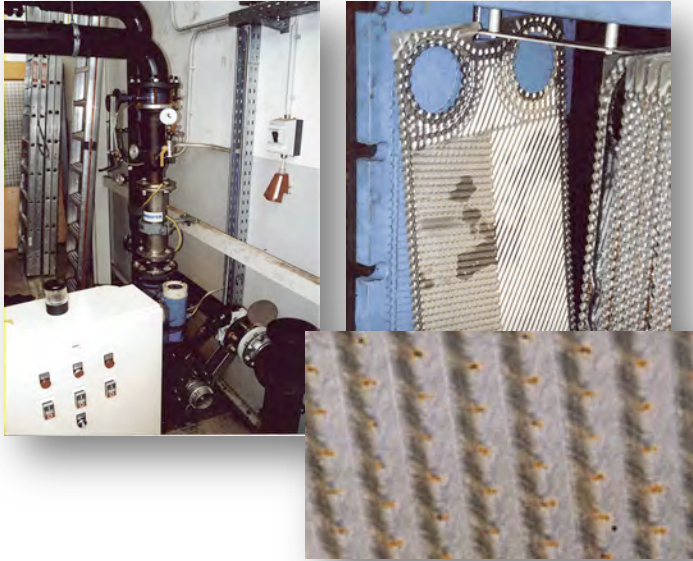
## Solution

- **ScaleBuster®** units allowed reduced chemical usage while keeping system free of scale buildup & corrosion

## Results

- **ScaleBuster®** technology installed in the mechanical room in 2008
- Excellent results of HVAC water treatment prompted hospital to specify the same technology for 7,000 Ton HVAC for a new wing being built

# Continental Teves - Germany



**Continental** 

## Water System Challenges

- Scale deposits & corrosion in stainless steel heat exchangers
- Shortened system life, excessive downtime

## Solution

- ScaleBuster® conditioners installed on the discharge side of pump

## Results

- Maintenance intervals lengthened by a factor of 4 to 6 times
- 2004 examination showed no corrosion of heat exchanger plates

