

PROTECT

Your Cooling system from Lime Scale and Corrosion without the use of harsh aggressive chemicals

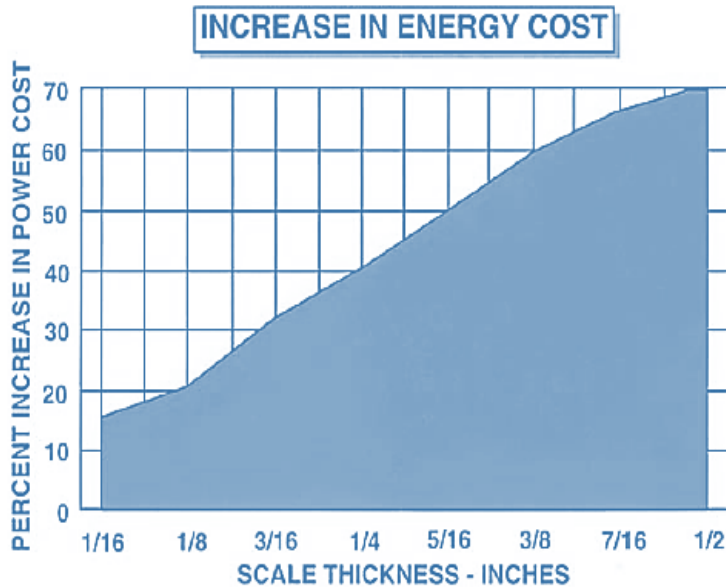


With the ever increasing cost of energy, businesses cannot afford to operate equipment that is even slightly inefficient. With the installation of a Superior water treatment system, cooling towers and chillers will operate at a higher rate of efficiency by eliminating scale build-up. This non-chemical water treatment has proven over and over again to yield substantial savings in water, time, energy and money while employing user-friendly and environmentally safe methods of treating water.

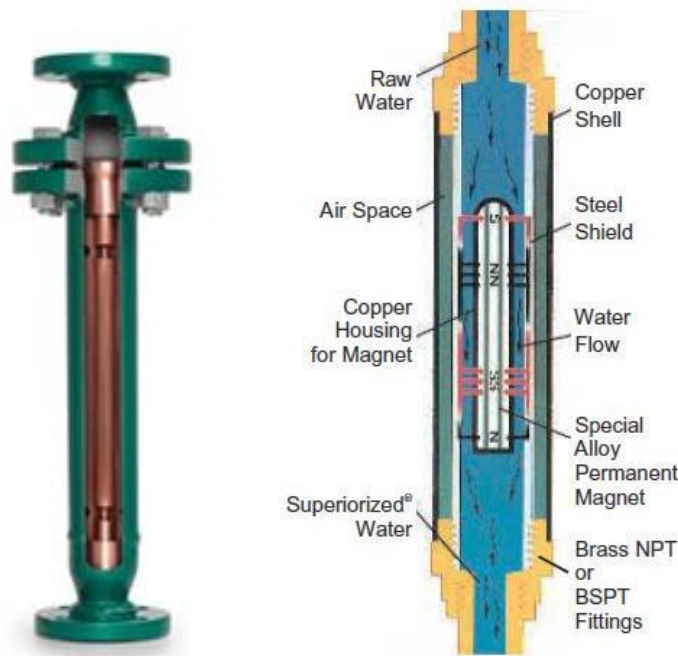
Optimum heat transfer coefficients, which enable maximum utilization of equipment, can only be assured when scale-free surfaces are maintained.

The Superior Water Conditioner patented process controls the formation of scale deposition and corrosion without the use of hazardous and costly chemicals. Because no chemicals are used, discharged water is pollution-free, therefore non-hazardous to the environment.

With over 50 years of experience and ongoing research, Superior is known as one of today's leaders in the non-chemical water treatment industry and will continue to be on the cutting edge of magnetic technology for years to come.



As water evaporates, minerals precipitate out and form a hard, brittle scale that collects in piping and on heat transfer surfaces. This insulating scale build-up causes reduced efficiency of equipment, as well as increased energy requirements, maintenance time and additional costs.



Interior make-up of
the Superior Water Conditioner

Water passing through Superior's permanent alternating, reversing polarity magnetic fields causes the minerals to stay suspended in the water so they cannot form a hard, brittle scale.

Rather than the usual hard, crystalline structure that is formed by water-borne minerals, SUPERIORIZED water keeps minerals in a soft, amorphous powder form. This amorphous powder deposits a thin film of aragonite talc on the inside of pipes and the water side of condensers which prevents free oxygen in the water (one of the most common causes of corrosion) from attacking the metal surfaces. Excessive solids settle to the bottom of the system in a soft, purgable form which is easily removed by bleed-off.

Superior Water Conditioner provides the following functions :

- Prevents scale deposition
- Descaling the existing scale
- Corrosion control
- White rust control

Sizing Chart



Model No.	Application	Capacity	Inlet-Outlet Connections	Diameter	Length	Weight
ACV-2	Cooling Tower	300 L/M	2" Flange	5 3/4"	14 1/4"	11 kgs
ACV-2.5	Cooling Tower	450 L/M	2 1/2" Flange	6"	16 1/4"	13 kgs
ACV-3	Cooling Tower	680 L/M	3" Flange	10"	26 3/8"	41 kgs
ACV-4	Cooling Tower	1100 L/M	4" Flange	11"	29 1/2"	58 kgs
ACV-5	Cooling Tower	1900 L/M	5" Flange	13 1/2"	37 5/8"	122 kgs
ACV-6	Cooling Tower	2450 L/M	6" Flange	16"	40"	186 kgs
ACV-8	Cooling Tower	3400 L/M	8" Flange	19"	42"	270 kgs
ACV-10	Cooling Tower	4500 L/M	10" Flange	21"	52"	338 kgs
ACV-12	Cooling Tower	7500 L/M	12" Flange	23 1/2"	54"	463 kgs
ACV-14	Cooling Tower	11300 L/M	14" Flange	25"	56"	565 kgs
ACV-16	Cooling Tower	14500 L/M	16" Flange	27 1/2"	66"	717 kgs
ACV-18	Cooling Tower	18900 L/M	18" Flange	32"	66"	980 kgs
ACV-20	Cooling Tower	24200 L/M	20" Flange	34 1/4"	74"	1130 kgs

Sizing and Installation

All water used in cooling towers, cooling systems and condensers must pass through the Superior Water Conditioner in order to protect the equipment from scale and corrosion.

A Superior ACV-Model unit should be installed in the recirculating water line on the discharge side of the pump in a vertical position, sized according to the flow rate of the recirculating water. Another Superior unit (RT or SF Model) should be installed in the make-up water line, sized to treat 100% of the make-up water (includes evaporation loss, drift and bleed-off). See diagrams on opposite page for more details.

Maintenance Procedures

At the time of installation, all water should be drained from the system and refilled with SUPERIORIZED water. If the system cannot be drained, increase bleed-off. The SUPERIORIZED water will then loosen and gradually dissolve any existing scale or corrosion build-up in the system.

A Proven Product

*ASHRAE sponsored Research Project 1155 clearly demonstrates the benefits and efficiency of physical water treatment in controlling calcium scale accumulations in recirculating open cooling water systems.

The report also concludes that best results were obtained when permanent, alternating, reversing polarity magnetic fields were used in the recirculating line of the cooling tower and that mineral fouling can be substantially reduced in heat transfer equipment (chiller/condenser) applications with substantial energy and water savings. Magnetically treated water also showed an 8% reduction in the surface tension.



ACV-6-K-10 Installed on a
700 ton Cooling Tower



ACV-14-K-10 Installed on a
1,000 ton Cooling Tower