



# TRIANGULAR WAVE Fact Sheet

## TRIANGULAR WAVE DEPOSIT CONTROL SYSTEMS SAVE WATER, SEWER, ENERGY AND CHEMICAL COSTS.

The Triangular Wave Deposit Control System is an advanced method for controlling scale and bio-fouling in fluid systems. It is applicable with once-through and recirculating HVAC, heating, and process cooling systems as well as agricultural, industrial processing, wastewater, and other fluid based systems. The TWT Deposit Control System performs many functions that lead to significant cost savings.

For example:

- Increased cycles of concentration in cooling systems=**Significant water savings.**
- Increased heat transfer from non-scaled tube surfaces=**Significant energy savings.**
- Deposit control means **blowdown can be reduced**, because concentrations of total dissolved solids in the water may be allowed to rise without concern for scale build-up.
- Deposit control means **no chemical treatment** is needed to keep equipment surfaces free of scale and biofilm.

A typical 500-ton cooling tower system located in the northeastern United States may be operated safely at a concentration ratio of 8, or higher, with a Triangular Wave Deposit Control System installed. If the original concentration ratio was 3, then the annual blowdown water savings would be 700,000 gallons, contributing to a **24% reduction in make-up water**. In warmer regions or areas of the country with harder water, the savings may be even greater.

The typical combined water and sewer costs for the blowdown water would be about \$3.00 per 1000 gallons, and the chemical treatment costs would be about \$6,000 per year. At those costs, **the annual savings would exceed \$8,200.**

The payback period for a TWT Deposit Control System is typically between 9 and 18 months. If a 20-year life at 3% interest is assumed, then **the present value of life cycle savings would be about \$108,000.**

The return on investment of a TWT Deposit Control System is undeniably significant from operational, economical, and safety points-of-view.

