



TRIANGULAR WAVE Fact Sheet

Triangular Wave System and Cooling Tower Water Control System Non-Chemical Treatment for Cooling & Process Water

Our Total Water Control System **TWCS** series filtration system is a **Triangular Wave Deposit Control Unit**, permanent media filter, and specially designed ionization (disinfection) unit for improving the efficiency of air conditioning, refrigeration, and industrial water cooling equipment.

The system removes suspended solids down to 5 microns, controls the dissolved solids (minerals), kills and prevents the regrowth of algae and bacteria, reduces water loss due to bleedoff by as much as 75% and provides a 100% savings on chemicals.



Tower Water Control System at SYSCO, Harrisburg, PA.

Suspended solids enter the evaporative cooling process as dirt, dust, organic matter and pollution. They are circulated through the system, fouling condensers, chillers, heat exchangers and other process cooling equipment.

The **TWCS** series filtration system, installed on the sump of cooling equipment, will substantially reduce the volume of suspended solids. This will allow heat transfer systems to operate at maximum design capacity and minimum energy cost. The result of operating water cooled equipment with clean water can add up to a return on investment of two years or less, depending on your application.

The **Triangular Wave** Unit controls deposits of scale and biofilm in the cooling system and in the **TWCS**. The Triangular Wave Unit also enhances the performance of the filter by causing the particles in the water to stay suspended and not clog the filter media.

The Ionization Unit is a specially designed silver and copper electrode system that dispenses minute amounts of silver into the water to kill bacteria, and minute amounts of copper to kill plant life. The flow from the water cooling system is cleaned continuously by the **TWCS**. The System size is selected to clean the entire system volume at least once an hour. Suspended solids concentrate in the filter, and are periodically back washed to drain. With the **TWCS** installed on the cooling tower

sump, suspended solids, dissolved solids, algae and bacteria, can be controlled and discharged



Triangular Wave Coil

without effecting or interrupting cooling equipment operations.