System: TWT-5C8-460
(small water-fed ice machines)
Deposit Controller / Reaction Chamber for Tubes & Pipes 1/2" or less

System: TWT-5C8-472FGRC
Residential/Commercial Deposit Control System with PVC Reaction Chamber for Tubes & Pipes 1" or less0

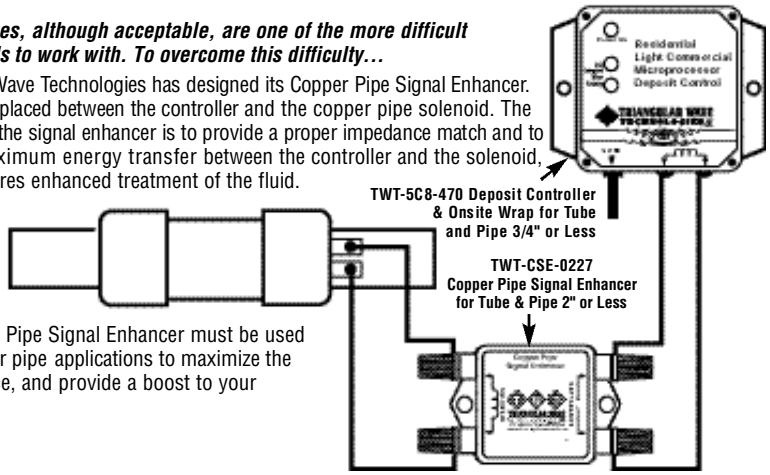
System: TWT-5C8-473P
(larger water-fed ice machines)
Deposit Controller / PVC Reaction Chamber for Tubes & Pipes upto 1 inch

System: TWT-5C8-473ST
(larger water-fed ice machines)
Deposit Controller / Stainless Steel Reaction Chamber for Tubes & Pipes upto 1 inch

To use in conjunction with the TWT Deposit Control Systems when required, Triangular Wave Technologies, Inc. has developed a line of factory-wrapped wire coil Reaction Chambers to address magnetic pipe environments. Typically, wire coil cannot be installed on any magnetic pipe, such as ***steel, and galvanized steel.*** When the coil is applied to a magnetic material, the pipe becomes a shield and prevents the wave energy from entering the fluid path. The TWT Reaction Chambers provide an easily installed section of non-magnetic pipe to provide the proper pipe material for the Deposit Control System to work as designed. The TWT Reaction Chambers are fully sealed, protecting their two layers of factory-wrapped coil. The Stainless Steel Reaction Chambers are designed and manufactured to meet the highest quality specifications.

Copper pipes, although acceptable, are one of the more difficult of materials to work with. To overcome this difficulty…

Triangular Wave Technologies has designed its Copper Pipe Signal Enhancer. This unit is placed between the controller and the copper pipe solenoid. The function of the signal enhancer is to provide a proper impedance match and to ensure maximum energy transfer between the controller and the solenoid, which ensures enhanced treatment of the fluid.



The Copper Pipe Signal Enhancer must be used in all copper pipe applications to maximize the performance, and provide a boost to your application.

Custom Orders: Upgrades available to meet your industry specific needs upon request

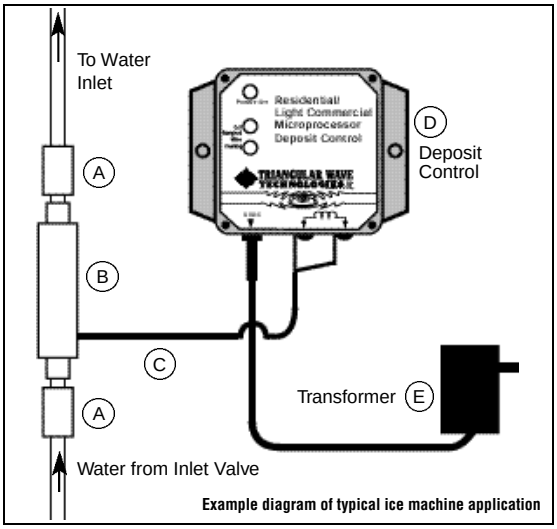
Our suggested considerations for optimal installation of the TWT Deposit Control System:

1. Cut water line and insert TWT Reaction Chamber using John Guest connectors. Clamp as illustrated.
2. Attach power supply to back of machine or adjacent to water-fed appliance in safe location.
3. Attach wire leads from Reaction Chamber to terminals on Deposit Controller.
4. Plug transformer/power supply into a standard110 VAC outlet.

The Deposit Control System will provide the means to keep deposits (calcium, lime, etc.) in solution for extended periods, if not disturbed. The ability of the fluid to retain the deposits in solution is reduced by fluid disturbances (e.g., pressure changes) and high temperature conditions (flashing, boiling, etc.). In Automatic Fill Systems, a Fill Solenoid Valve will be used to control the fluid level in the fill system. Where a large pressure change takes place immediately downstream of the solenoid valve, ***TWT recommends that the Reaction Chamber and/or the on-site wrap be located downstream from the solenoid valve to avoid this pressure change point.***

Note: **Deposit Controller/Reaction Chamber should be installed on water feed line after any filter and/or solenoid valve system.Install Reaction Chamber on water feed line midway between solenoid valve and water tank.**

When water boils and is evaporated, the calcium and other dissolved solids remain and form deposits. These deposits will be softer and more easily removed when treated by the TWT system. If a heating system can be operated without boiling/flashing on the surface of the heating element, a significant reduction in deposits will be obtained. As the fluid temperature is lowered from boiling, the ability of the TWT-treated water to hold the minerals in solution increases.



Example diagram of typical ice machine application

When the TWT systems are properly installed, the effects of the Triangular Wave Technology Treatment Last Downstream

(A) John Guest Connectors • Clamped or Glued Assembly
(B) TWT Reaction Chamber
(C) Wire Leads
(D) TWT-5C8-460 • TWT-5C8-473P or • TWT-5C8-473ST Deposit Controller
(E) Transformer