



TRIANGULAR WAVE Fact Sheet

TRIANGULAR WAVE DEPOSIT CONTROL SYSTEM CONTROLS SCALE BUILDUP IN REVERSE OSMOSIS WATER TREATMENT SYSTEM.

CLIENT: CONFIDENTIAL PHARMACEUTICAL COMPANY

INSTALLATIONS: REVERSE OSMOSIS WATER FILTRATION SYSTEM AND WATER DISTILLATION SYSTEM

Two Triangular Wave Deposit Control Systems have been conditioning water in a major pharmaceutical company research laboratory.

The reverse osmosis water filtration system that is served by the first Triangular Wave System produces 250 gallons of water per hour. The Triangular Wave System was installed on the 1.5 inch stainless steel water feed line.

The laboratory scientists report that prior to the installation of the Triangular Wave System, the filter membranes were changed every three months; now they last for five months.

In addition, previously the permeate product volume would begin to decrease after the second month. Now, the permeate product volume does not decrease until after the fourth month. Visual inspection of the filter assembly after installation and operation of the Triangular Wave System showed:

- No scaling of the flanges or locking rings. Prior to the Triangular Wave System wrenches were needed to disassemble the filter assemblies; now the disassembly can be accomplished by hand.
- Filters were not scaled on the surface. The filter membranes were filled with dirt and particulate matter; as would be expected. The extended life of the membranes is due to the lack of scale accumulation on the surface.
- No scale formed around the edges of the filter assemblies, and no short circuiting of the filters was found.

The second Triangular Wave System in the laboratory was installed on the water distillation unit. The coils in the unit are kept scale free by the Triangular Wave System.