



TRIANGULAR WAVE

Fact Sheet

FS33

TWT DEPOSIT CONTROL SYSTEM CONTROLS SCALE BUILDUP IN REVERSE OSMOSIS WATER TREATMENT SYSTEM, REDUCES OPERATING COSTS.

CLIENT: CONFIDENTIAL PHARMACEUTICAL COMPANY

INSTALLATIONS: REVERSE OSMOSIS WATER FILTRATION SYSTEM AND WATER DISTILLATION SYSTEM

A major pharmaceutical company had been seeking a solution to the flow restriction and particulate build-up experienced in using a Reverse Osmosis treatment system in their research laboratory. Reviewing their options, they purchased and installed two Triangular Wave Deposit Control Systems to meet their configuration requirements

The reverse osmosis water filtration system 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; with the use of the TWT Deposit Control System, they now last for five months, a lifecycle extension of 66%.

In addition, previously, the permeate product volume would begin to decrease after the second month following a membrane change. Now, there is no decrease until after the fourth month, a 100% improvement.

Visual inspection of the filter assembly after installation and operation of the Triangular Wave Deposit Control 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 simply and easily 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, a direct result of the Triangular Wave installation.
- No scale formed around the edges of the filter assemblies, and no short-circuiting of the filters was found, a problem previously experienced before the Triangular Wave installation.

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

TWT Deposit Control Systems work to protect other fluid treatment technologies as well, including ozone, ultraviolet, and filtration systems, keeping them clean and enhancing their operation. In this way, their full treatment benefits are realized, with reduced maintenance requirements. Consider using TWT Deposit Control Systems in conjunction with any existing or potential fluid treatment systems as a complementary technology. For further details on how you can leverage TWT Deposit Control benefits, please contact us.