



www.dimewater.com



COMPLETE NANO SYSTEMS

Nano Filtration-The newest and most leading edge technology in water treatment is now available for practical use in your home, business or manufacturing facility.

Nano Filtration is a pressure driven separation process. The filtration process takes place on a separation layer formed by an organic semi permeable membrane. The driving force of the separation process is the pressure difference between the feed (retentate) and the filtrate (permeate) side at the separation layer of the membrane. However, because of its selectivity, one or several components of a dissolved mixture are retained by the membrane despite of the driving force, while water and substances with a molecular weight less than 200D (daltons) are able to permeate the separation layer. Because nano filtration membranes also have a selectivity for the charge of the dissolved components, monovalent ions will pass the membrane and divalent and multivalent ions will be rejected.

NANO SYSTEMS 1,500 AND 3000 GPD FEATURES:

- All items except atmospheric storage tank mounted on an aluminum skid with wheels for ease of installation. Entire unit without atmospheric storage tank(s) measures 48" wide X 25" deep and 61" tall.
- Maxi-Cure 3000 unit for pretreatment.
- NANO unit with thin film element. Designed for 75% recovery and 66% rejection.
- Rotary vane pressure pump.
- Three pressure gauges.
- Waste and product flow meters.
- High and low pressure safety switches.
- Two 2.5" X 20" long cartridge pre filters. 5 micron and carbon block.
- Recirculation and drain valves.
- Automatic flush on start up.
- Three tank level switches. System on/system off/re-pressure pump control.
- Automatic controller with four status lights.
- TDS monitor on treated water line.
- Complete 12gpm @ 50psi re-pressure pump system
- UV light on outlet as final protection
- Unit completely tested on a pallet suitable for LTL truck shipment

Comparison Reverse Osmosis vs. Nano Filtration

Comparison	R.O.	Nano
Filtration Level	0.0001 to 0.001	0.0008 to 0.01
Size of virus removal	0.005 to 0.01	0.005 to 0.01
Size of bacteria removal	0.2 to 10	0.2 to 10
Filtration of Bacteria and viruses	YES	YES
Typical recovery (%)	50%	75%
Typical TDS reduction (%)	98%	70%
Typical points of PH reduction	2+	Less than 1
Need for permeate pH correction	Yes 50%	No 90%
Residual water hardness (gpg)	0	1
Maximum raw TDS (ppm)	2000	1500
Average high pressure (psi)	150	90