

UV Systems



UV systems will protect you from living organisms in your water such as bacteria and cysts. Ultraviolet (UV) water purification systems are trusted by thousands of people worldwide for use in homes, cottages, and in many industrial and commercial applications. UV systems come in a variety of sizes and can be used to purify the water for a single faucet or for an entire home or larger building. UV systems are superior to chemical water disinfection because they don't add any harmful chemicals to the water, or to the environment.

Specification:

- Ultra violet radiation is natural source of purification.
- Ultra violet radiation band of invisible light in the electromagnetic spectrum, in the range of 200 – 400 nm wavelengths.
- U.V. is used to provide Bacterial Disinfection in water. It does not change the Physical or Chemical Characteristics in water. U.V. provides disinfection On Contact. It does not have any residual properties left in treated water.
- Special High Germicidal Lamps produce high U.V. output in 254 nm range.
- There are no know micro organisms resistant to U,V,
- U.V. water purification is preferred the world over because it is the simplest & most practical means of destroying micro organisms in water.

Microbial Standards For Drinking Water			
Test	W.H.O.	U.S.P.H.A.	SWE Standard
Total Bacterial Count	Test not specified	500 organisms/ml.	Les than 500 organisms/ml.
Coli form	95% of sample should not coli forms & maximum 10 coliforms/100ml.	95% of sample should not contain coli form	NIL (Coli forms)
E-Coli	No E.Coli in 100ml.	No E.Coli in 100ml.	NIL (E. Coli)

Conventional Methods Of Water Treating			
	Chlorine	Ozone	Ultra Violet
Capital cost	Lowest	High	Low
Ease of installation	Good	Poor	Excellent
Ease of Maintenance	Good	Poor	Excellent
Cost of Maintenance	Medium	High	Lowest
Operating Cost	Low	High	Low
Frequency Of Maintenance	Frequent	Continuous	V. Infrequent
Control System	Poor	Good	Excellent
Virucidal Effect	Good	Poor	Good
Toxic Chemical	Yes	Yes	No
Residual Effect Problem with	Yes	Yes	No
Hazards	High	Yes	Low to none
Contact Time	30 - 60 minutes	High	1 – 5seconds
Disinfection Performance	Leaves some pathogens	Kills all microbes	Kills all microbes
Effect on Water	Organochlorine compounds, Taste & pH changes	Unknown	None

The Ultra violet dose required for destruction is about the same for each virus, while higher dose of chlorine & ozone needed.

Micro – Biological Problem In Various Industries:

Pharmaceuticals Industry : # Bacterial count in process water.

Bottling Industry : # Decreased shelf life of the end mineral water, Soft Drink, product.

Dairy Canneries : # Contamination of bottles.

Food & Beverage Industry : #Decreased shelf life of the end product.

Fish Hatcheries : # Whirling disease.

Paint Industry : # Decreased shelf life of the water based paints.

Poultry Industry : # Increased bird mortality.

Main Feature:

- U.V. Chamber S.S. 316 electropolished purification chamber for life time corrosion free service.
- High intensity U.V. lamp of continuously use. (Imported)
- Lamp Monitor indicates functioning of the U.V lamp
- Quartz jackets silica used for its proven capability of 99% transmitting maximum Ultra Violet rays for peak Ultra Violet dosage 30,000 uW sec / cm² .
- Wiper Assembly facilities periodic cleaning of quartz glass to ensure peak efficiency without interruption of purifier operation
- Working pressure maximum 3.5 kg/ cm² or gravity.
- Continuously 24 hours use. Operating expenses of less than one paisa per 10 liters of purified water.
- Removable Flange Heads for easy and complete disassembly without use of special tools.

Optional Accessories :

- Time Elapse Meter for identification of U.V lamp life utilized
- Optional Prefilter for cloudy water or filtration systems .
- Ultraviolet Monitor to sense and indicate the level of germicidal U.V dosage 30,000 uW sec / cm²

Quality Control:

Every U.V lamp & Quartz jacket Silica individually checked and each completed System tested and run before dispatch

Check Stainless steel & silicon material i.e. Gasket, 'o' Ring with Validation certificates.

Our comprehensive after sales service includes a full range of spares and professional technical backup, with an optional Annual Maintenance Contract in all over India.