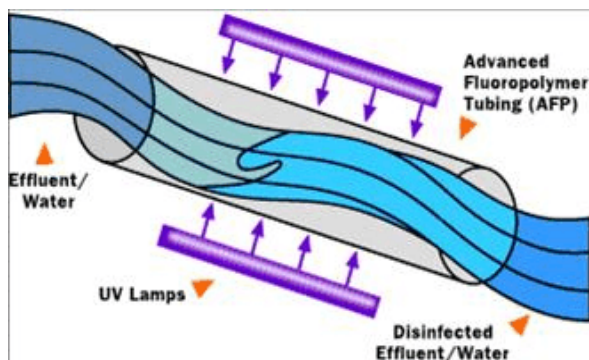


WHY NON CONTACT™ UV?

What is Non Contact UV?

Non-Contact™ UV is the process of disinfecting or treating water without submerging a quartz sleeve assembly into the water flow. Instead the water, is flowing through the UV transmitting AFP™840 tube, with the lamps outside the flow of the water irradiating inward from multiple sides.

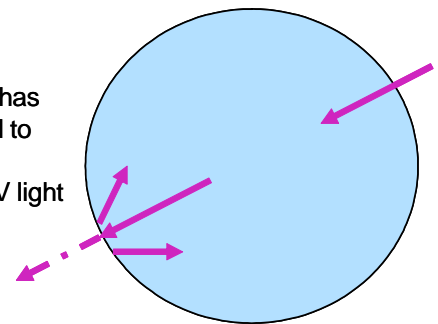


Keeping the lamps outside the flow of the water means that the lamp racks can be removed while the system is in operation without creating a loss in UV Disinfection from the system. Most important- the lamps can be changed in minutes because the lamps come out of the system DRY.

How Does Non-Contact™ UV work?

Using Enaqua's proprietary AFP™840 material that allows Germicidal UV through, but keeps Visible light out (preventing Photo-Reactivation), the water flows through special tubes that produce complete and uniform disinfection as the water passes through.

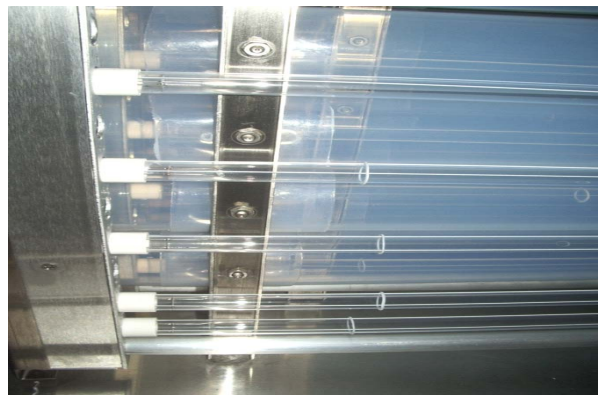
AFP structure has been designed to create internal reflection of UV light



Because the flow takes place in circular tubes having extremely smooth internal surface, the flow distribution in the Non-Contact™ systems is uniform turbulent plug flow- meaning 100% of the water that enters the tube will be exposed to the maximum amount of UV before it is discharged.

What are some advantages of Non-Contact™ UV?

- The lamp racks come out dry and ready for service; reducing the amount of time spent changing lamps. Typical change out time is one (1) minute per lamp.
- There is no need for special cleaning tanks or chemicals for the quartz sleeves; because there are no quartz tubes to foul, clean or break.
- There are no hydraulic seals to leak or replace when changing lamps.
- Lamps have no potential to contact effluent. This eliminates any possibility of a lamp breaking and contaminating the effluent with glass and mercury.
- Effluent water flows through low fouling AFP™ tubes, instead of flowing in a channel and around the quartz sleeves. This results in uniform and predictable flow, allowing the system performance to be accurately predicted.
- There are no dark spaces, slow or hidden spaces for algae and germs to grow.



Non-Contact™ UV is the only method of disinfection that allows:

1. Dry Removal of the Lamps
2. Lowest Maintenance and Operation Costs
3. Complete and Uniform Disinfection
4. 100% Algae Free operation
5. True Plug Flow Hydraulics
6. In Channel or Pressurized operation

