

## PRODUCT-LAMP

Low UV Lamp  
Which sterilize  
bacterial and remove  
TOC that exist  
in DI WATER.



### LAMP TYPE

- Ultraviolet - UV Lamp
- Low Pressure Lamps - TOC LAMP
- Low Pressure Lamps - Germicidal LAMP
- Excimer Lamps - lithography Lamp
- Amalgam Lamps
- Super Pure Water Treatment
- Electronic Ballast

### FEATURE

- UV LAMP for TOC removal is used for decomposing the organic matter of several ppb units contained in the pure water.
- UV LAMP is used for removing the organic matter of ppb unit in the pure water by changing CO<sub>2</sub> and H<sub>2</sub>O through a process such as chemical reaction and decomposition of the organic matter.

## PRODUCT-LAMP(Part)

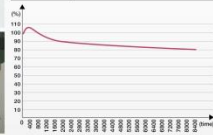
### Low Pressure Lamps - TOC LAMP.

#### APPLICATIONS & FEATURES



In Ultrapure water applications, FNS TECH UV lamp are used for the effective reduction of organics, commonly referred to as TOC (Total Organic Carbon). UV light in a 185nm wavelength promotes the formation of free radicals, leading to the oxidation of organics into CO<sub>2</sub> and H<sub>2</sub>O.

#### TOC UV Lamp Retention rate



## PRODUCT-LAMP(Part)

### Low Pressure Lamps - STERILIZE LAMP.

#### APPLICATIONS & FEATURES



- Classical low pressure UV lamps offer exceptional efficiency. 40% of the electrical power can be used for disinfection as UVC radiation at 254nm.
- Low pressure UV lamps find particular application in the disinfection of water, air and surfaces in the food and beverage industry and also in water works, air conditioning and water sewage treatment plants.
- In addition, their unique coating ensures that they do not suffer the unwanted transmission loss of quartz glass associated with conventional UV lamps.

## PRODUCT-LAMP(Part)

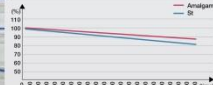
### Low Pressure Lamps - Amalgam LAMP.

#### APPLICATIONS & FEATURES



- Amalgam lamps are extremely long life, high power, low pressure lamps.
- They deliver up to ten times the UV power density of classic mercury low pressure lamps and can be used even at high ambient temperatures of up to 80°C Celsius.
- The result is a virtually constant disinfection action over the total operating life of the lamp. And up to 80% of the UVC output power is delivered for 12,000 operating hours.

#### Amalgam & ST UV Lamp Retention rate



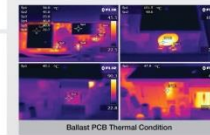
## PRODUCT-LAMP(Part)

### ELECTRONIC BALLAST.

#### APPLICATIONS & FEATURES



- A series of electronic high frequency ballast matched to provide optimal performance with our lamps in a true Systems approach.
- This extensive line of ballast, covering the gamut of germicidal lamp, delivers all the advantages of electronic High Frequency operation.



## PRODUCT-TOC OXIDATION SYSTEM

### TOC Version 1



### TOC Version 1



### TOC Version 2



#### APPLICATIONS & FEATURES

- Traces of organic matter can be efficiently removed using low pressure UV lamps.
- No additives are used, which prevents a deterioration of water quality.
- This is the clean removal technology for organic matter.
- With the employment of large size lamps, it is possible to meet the requirements of large volumes of water treatment.
- All products can be changed upon request.

## PRODUCT-UV STERILIZER SYSTEM

### ST Version 1



### ST Version 1



### ST Version 2



#### APPLICATIONS & FEATURES

- Ultraviolet energy is radiated by low pressure mercury lamps. These germicidal lamps are made of a special hard glass that allows the transmittance of shortwave ultraviolet energy. Predominantly the 254nm wave-length.
- All products can be changed upon request.