ULTRAVIOLET DISINFECTION

Validated Drinking Water Systems



PRODUCT OVERVIEW

The **SUN 12E and SUN 20E A300** systems are manufactured in the USA and have been validated to treat drinking water.

Glasco UV integrates state of the art ballast, lamp and UV monitoring technologies from Germany into this product line of drinking water systems.

The SUN 12E A300 was first validated in 2003. Today, we have numerous installations that have been running the system for 10 continu-ous years.

The BT-6000 series was validated in 2017 and the BT-9000 series was validated in 2018

FEATURES

- Bioassay validated HydroQual, HDR and Carrollo
- Tested from 70 to 99% UVT
- Validated UV lamp 320 watt amalgam
- UV monitoring
- Automatic cleaning
- Heraeus low pressure amalgam lamps
- Removable heads
- Highly polished internal surfaces
- Remote stainless steel enclosures
- Allen Bradley PLC



All manufacturing is done in our Mahwah, NJ manufacturing facility.

VALIDATED INSTALLATIONS



STANDARD FEATURES

- 316L stainless steel vessel manufactured in USA
- Electropolished internal and external surfaces
- Removable heads
- UV monitor
- Drain, monitor and sample ports
- RF Flange fittings
- Remote Ballast Control Center (BCC)
- Energy efficient electronic ballasts
- Running time meter
- LED lamp status indicators
- 16,000 hour lamp life
- GE Type 214 quartz sleeve

DATA REQUIRED FOR SIZING

- Flow rate
- UV transmission at 254 nm
- Pipe sizing
- Cleaning and sanitization program

OPTIONAL FEATURES

- Hand Off Auto switch (HOA)
- Automatic wiping
- PLC control
- Explosion proof
- ASME Code Stamp

BENEFITS

- Non chemical method
- Instantaneous kill
- · Effective on a wide range of pathogens
- No heat treatment in processing
- · No change in odor, color or taste
- No residuals left in water

VALIDATION

- Johnstown NY Validation Center
- Tested on UVT of 70%+
- UV lamps validated
- Headloss at peak flow <13" UV lamps validated

ABOUT UV

UV technology uses specialty lamps to target and disable waterborne disease causing microorganisms (pathogens).

Over 100 years ago, scientists discovered that when pathogens were exposed to UV light, their reproduction was limited. The light that they used resided in the UVC range of the light spectrum. Specifically, they discovered that light in the 254 nanometer (nm) range was the most effective.

When pathogens are exposed to UV light, their cells become damaged and this damage inhibits reproduction. The UV light damages the cell's DNA and RNA and once damaged, they are unable to replicate and rendered harmless.

The amount of damage is a result of the intensity of the UV light multiplied by the time the water is exposed to the light (time x intensity). The applied dosage is commonly referred to as microwatts and is often expressed as mJ/cm2. Doses of 40,000 microwatts (40 mJ) are accepted for drinking water disinfection.

UNITS

SUNLIGHT SUN A300 SERIES GLASCO BT SERIES

UNIT	DOSE	FLOW RATE	UVT	FLANGE SIZE
SUN-12-E	40 MJ/CM2	2 MGD	90%	6"
SUN-20-E	40 MJ/CM2	2 MGD	75%	8"
IL-BT-6000-4	40 MJ/CM2	.9 MGD	90%	6"
IL-BT-9000-4	40 MJ/CM2	1.8 MGD	90%	8"

The above units are typical and are displayed to treat clean water flows and deliver a validated dosage of 40 mJ. Please contact factory for sizing.



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