

Ultraviolet Germicidal Fixtures for Liquid Storage Tanks



American Ultraviolet®

Insightful Solutions. Remarkable Results. Since 1960.

Liquid Storage Germicidal Solutions

Keeping microorganisms out of the headspace in storage tanks is especially important when sweeteners and water are used as ingredients in food and beverage manufacturing operations. Following are a few solutions American Ultraviolet offers.

LTC Series

LTC Ultraviolet Germicidal Fixtures are direct top head mounted units ideally suited for liquid storage tanks with product dropout rates of up to 200GPM. LTC fixtures are designed to mount directly to the tank using a 3" connection, which is provided (other connection sizes and types are also available).

Configuration

Standard

- Two high-output UVC lamps
- Two 10" (10 micron electrostatic) and one (0.3 micron HEPA) filters
- Entire unit certified as HEPA filter
- Lamp/ballast failure indication
- Tank-mounted only
- Shatter-proof lamps
- 120/220 V; 50/60 Hz

Options

- Heat control
- Air-flow indication
- Remote mounted lamp-out and airflow indication

Construction

Standard

- 304 stainless steel
- Continuously welded
- 3" sanitary (tri-clamp) tank connection

Options

- 316L stainless steel
- Alternate size and type tank connections (flange, threaded, etc.)



LTC Series



BT-8-120 Conditioner
with LTX-14 Tank Vent

Diversified Clientele

Following are a few of the many satisfied customers American Ultraviolet has helped with ultraviolet disinfection needs:

Coca Cola Bottling
Seagram & Sons
Morningstar Foods
Minute Maid
Domino Sugar
Ralston Purina Co.
Lion Brewery

Dupont
M&M/Mars
Dr. Pepper/7-Up
Guinness Brewing
Sealtest Foods
Mott's Juice
Kraft

Pepsi Cola
Heinz Co.
Anheuser-Busch
Hershey's
National Starch
Molson
Caribe

BT Series

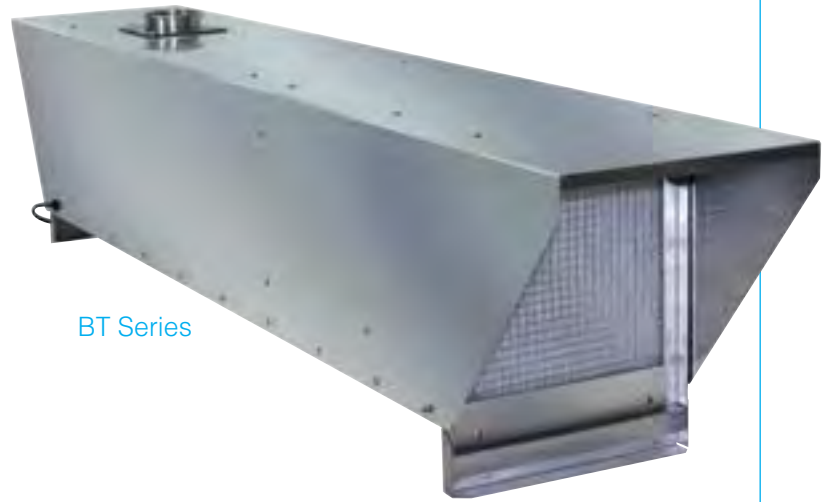
BT Ultraviolet Germicidal Fixtures are primarily for liquid storage tanks with product dropout rates of up to 1,500GPM. They can be remote, or mounted directly to the tank. BT Series fixtures include many standard features that are optional on the LTC Series, and the added versatility of remote mounting makes maintenance very easy.

Standard Features

- >30,000 μ W-s/cm² UVC dosage
- High-output lamps
- Shatterproof lamps
- 4, 6, and 8-lamp configurations
- LED lamp-out indication
- Air flow indication
- Built-in rain/sun cover for filter & control panel
- Single-piece cover design to help resist outdoor elements
- Remote-mount or tank mount
- 4" tri-clamp connection
- (1) 14" x 14" Electrostatic 10 micron pre-filter
- (1) 14" x 14" Absolute 0.3 micron HEPA filter
- 120/220 V; 50/60 Hz

Options

- Alternate connection size/types (i.e. flange, straight pipe, larger diameter, etc).
- Heat control



BT Series



Lamp-out LED indicator lights, and air flow indication, are standard features on the BT Series control panel.

Tank Vents

American Ultraviolet recommends using tank vents in conjunction with LTC, BT and SC-4 Series fixtures. Tank vents help maintain clean air in the headspace of liquid storage tanks in several ways:

- Vents allow air to exit, so fixtures can constantly feed the tank with fresh, clean air.
- If greater than anticipated product dropout occurs, reverse suction may also occur, and LTX Series Tank Vents (10" and 14" vents) will prevent the tank from receiving contaminated air. The LTX tank vents work with LTC, BT and SC-4 fixtures.

The LTX Series Tank Vent standard filter package includes two 10 micron electrostatic filters and one 0.3 micron HEPA filter. American Ultraviolet can also provide virtually any size and type of tank connection fitting for our tank vents.



LTX Tank Vent

SC-4 Series

SC-4 Ultraviolet
Germicidal Fixtures
from American

Ultraviolet are top-of-the-
line, fully customizable
UVC air treatment units

that provide an outstanding
solution for unique liquid
storage tank applications. All SC-4 fixtures feature a remote-mounted control panel enclosure
and options for output to process controls.



SC-4 Series

Standard Features

- (4) high output UVC lamps
- Remote NEMA 4x control enclosure
- High-pressure blower
- Electrostatic (10 micron) and HEPA (0.3 micron) filters
- Air-flow indication
- Lamp/Ballast failure indication
- 4" tri-clamp tank connection
- Remote or tank-mounted
- Shatter-proof lamps

Options

- Heat control
- 316L stainless steel construction
- Additional lamps
- Higher output blower
- Lamp intensity monitoring
- Food-grade & continuous welds
- Alternate connection sizes and types

TTG Series

American Ultraviolet TTG Series Internal Tank Equipment Fixtures are designed to disinfect liquids and the head space while inside storage tanks. TTG Series fixtures from American Ultraviolet are designed to control yeast, mold and bacteria in many applications, including:

- De-ionized water storage
- De-mineralized water storage
- Maintenance of:
 - Pharmaceutical holding tanks and stills
- Photochemical
 - Polymerization, bleach and oxidation
- Pilot plant research
- Chemical drum disinfection
- Container disinfection
 - Milk cartons, food product cartons, cans and tubes

TTG
Series

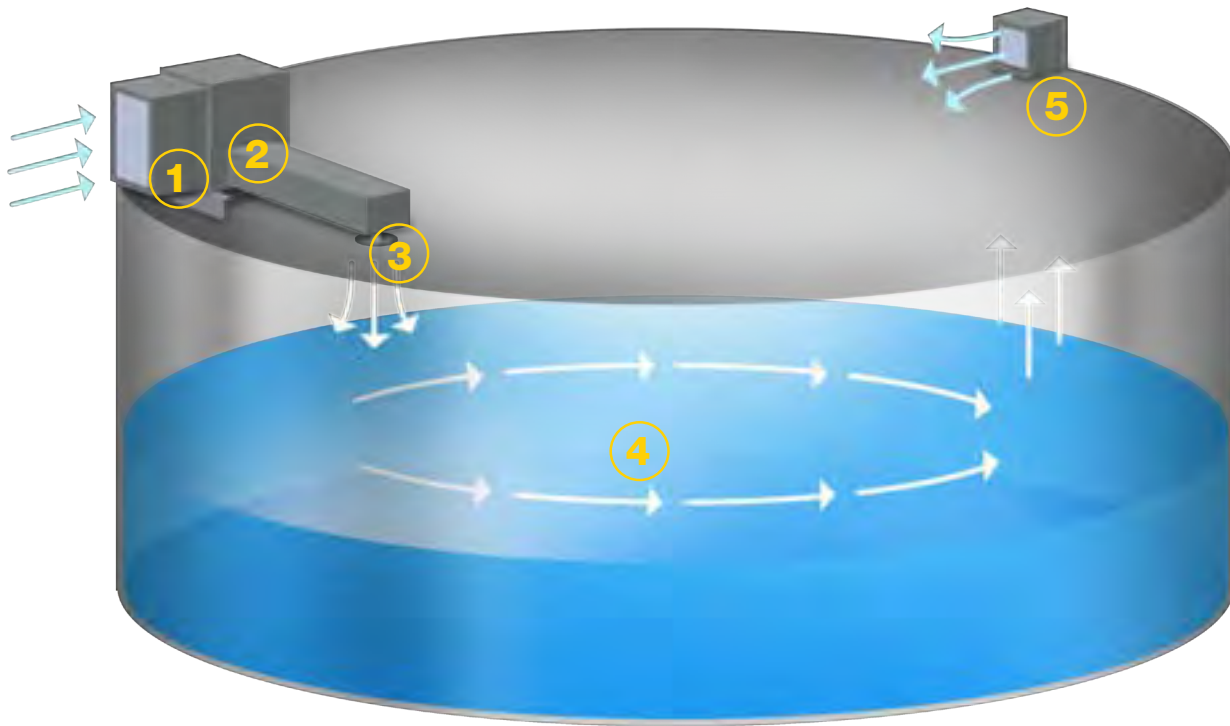


Benefits

- High intensity UV lamp
- Peak radiation: 253.7 nanometers
- Long lamp life = 12,000 hours
- High-transmissivity UV Quartz sleeve
- Serviceable without product contamination
- "Tube-Guard" lamp operation indicator
- Stainless steel housing
- Four insertion depths: 18, 24, 36 and 64"



Storage Tank Conditioners



Conditioners have become the standard to control microbial growth, most often used in liquid sugar and syrup tank applications. These industrial grade systems are designed to minimize condensation and destroy airborne contamination through a five stage process:

STAGE 1

Incoming ambient air is filtered through a poly media pre-filter to remove contaminating particles down to 10 microns in size.

STAGE 2

Air is then filtered further, through the HEPA chamber, capable of removing particulates down to .3 micron in size.

STAGE 3

Filtered air passes through an ultraviolet chamber across ultraviolet germicidal lamps, peaking at the 253.7 nanometer wavelength, which is proven to kill micro-organisms.

STAGE 4

Treated air is then delivered across the headspace of the tank reducing condensation and subsequent microbial contamination.

STAGE 5

After traveling across the headspace of the tank, air is exhausted out the filtered vent.

Other Germicidal Solutions from American Ultraviolet:



FOOD SAFETY

Applying UVC light to inactivate DNA/RNA-based microorganisms dates back to the 1850's. UVC solutions reduce the risk of losing a product because of unwanted microorganisms, and improve the efficiency of operations.



SURFACE

Direct UVC fixtures for surface and product disinfection. Fixtures are designed with one, two or four lamps. Custom systems are also available for mounting onto existing conveyors.



HVAC

Custom and standard in-duct, on-coil, and upper room UV solutions increase efficiency, prolong equipment life, and improve indoor air quality throughout entire buildings.



WATER

AQ Series water treatment units provide bacteria and virus protection by purifying water in individual faucets, and/or throughout an entire home or business.



HORTICULTURAL/
CANNABIS

Combat powdery mildew, bud mold, and other types of DNA-based molds and bacteria that plague growing plant life, including cannabis plants with UVC fixtures.



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