INDUSTRIAL LARGE FLOW ULTRAVIOLET DISINFECTION SYSTEMS

SYSTEM OVERVIEW

Industrial Ultraviolet Disinfection systems are manufactured in the USA and are designed to treat flows ranging from 100 to 7,000 gallons per minute (380-26,500 lpm).

The systems are constructed from high grade 316L stainless steel and are electropolished to ensure high purity and longevity.

Systems are powered, monitored and controlled via a remote wall mounted electrical enclosure with on/off switch. The Ballast Control Center (BCC) houses the electronic ballasts. The BCC displays lamp status indicators and a running time meter.

While these systems are used primarily for disinfecting process water, they can also be configured and sized for Total Oxidizable Carbon reduction (TOC) and Ozone destruction (OD).

STANDARD FEATURES

- 316L Electropolished Stainless Steel
- Removable Heads
- Adjustable Mounting Legs
- Monitor Port
- Drain Port
- NPT/Flange Fittings
- 120-277 Volt
- Remote Ballast Control Center
- On/Off Switch
- LED Lamp Status Indicators
- Running Time Meter
- UV lamps made in USA
- 254 nm or 185 nm UVC Lamps
- GE Type 214 Quartz Sleeve
- Machined Aluminum Compression Nuts

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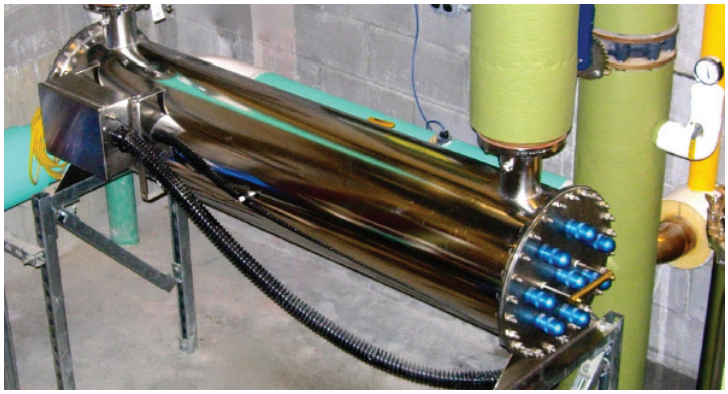

ULTRAVIOLET LAMP SYSTEMS

Systems use special UV lamps to target and disable harmful waterborne disease causing microorganisms (pathogens), destroy ozone and reduce total oxidizable carbon in water supplies.

Over 100 years ago, scientists found that when pathogens were exposed to UV light, their reproduction was limited. The light resided in the UVC range of the 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 inhibits reproduction. UV light damages the cell's DNA and RNA and once damaged, they are unable to replicate and therefore, rendered harmless.

UV lamps in the 254 nm range are also used to destroy ozone in water. The UV energy turns the ozone into water. UV lamps in the 185 nm range are used to reduce organics in the water. 185 nm lamps create hydroxyl free radicals, which help oxidize the organics into CO2 and H2O.

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 dosage, referred to as microwatts, is often expressed as mJ/cm2. Doses > 30,000 microwatt dose (30 mJ) are accepted for water disinfection. Doses of >100 mJ are used for Ozone Destruct and TOC Reduction.

MODELS	GPM	LPM	INLET/OUTLET	WATTS	LAMPS	VOLTAGE	CHAMBER SIZE
FUV 300-4	100	379	2" NPT	340	4	120-277V	30" x 10" x 13"
FUV 300-6	150	568	3" NPT	510	6	120-277V	30" x 10" x 13"
FUV 300-8	200	757	3" NPT	680	8	120-277V	30" x 10" x 13"
FUV 5000-2	100	379	2" FLANGE	340	2	120-277V	60" x 5" x 11"
FUV 5000-4	200	757	4" FLANGE	680	4	120-277V	60" x 10" x 16"
FUV 5000-6	300	1,136	4" FLANGE	1,020	6	120-277V	60" x 10" x 16"
FUV 5000-8	400	1,514	4" FLANGE	1,360	8	120-277V	60" x 10" x 16"
FUV 6000-2	200	757	2" FLANGE	680	2	220-240V	68" x 7" x 11"
FUV 6000-4	400	1,514	4" FLANGE	1,400	4	220-240V	68" x 10" x 16"
FUV 6000-6	600	2,271	6" FLANGE	2,100	6	220-240V	68" x 10" x 18"
FUV 6000-8	1,000	3,785	6" FLANGE	2,800	8	220-240V	68" x 14" x 20"
FUV 6000-10	1,400	5,300	8" FLANGE	3,500	10	220-240V	68" x 14" x 20"
FUV 6000-12	1,600	6,056	8" FLANGE	4,200	12	220-240V	68" x 16" x 22"
FUV 6000-16	2,000	7,570	10" FLANGE	5,600	16	220-240V	70" x 14" x 18"
FUV 6000-20	2,800	10,598	10" FLANGE	7,000	20	220-240V	70" x 14" x 18"
FUV 6000-24	3,500	13,248	16" FLANGE	8,400	24	220-240V	70" x 24" x 36"
FUV 6000-30	4,100	15,519	20" FLANGE	10,500	30	220-240V	70" x 24" x 36"
FUV 6000-36	5,000	18,925	TBD	11,520	36	220-240V	70" x 24" x 36"
FUV 6000-40	6,000	22,710	TBD	14,000	40	220-240V	70" x 24" x 36"
FUV 6000-48	7,000	26,495	TBD	16,800	48	220-240V	70" x 24" x 36"

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