



ETS UV Water Treatment Systems

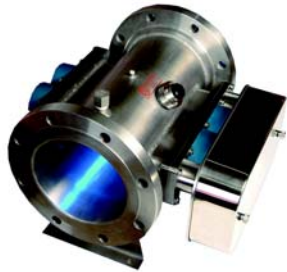
The ETS UV Systems are “medium pressure” as research has shown this type of UV to be most effective in destroying chloramines and disinfecting. Medium pressure UV Systems consume and transfer to the water somewhere between 10 and 20 times more energy than other forms of UV and are more effective at breaking apart the chemical bonds of chloramines. These UV systems have CSA, UL and NSF 50 approvals. Cryptosporidium and Giardia are common chlorine resistant pathogens quickly destroyed by high doses of UV making this a good secondary treatment as it aids rapid disinfection. There also seems to be some coagulation making filtration more effective.

UV treatment normally takes place after filtration, but before heating and chemical treatment in a chamber plumbed into the pool return line and designed to take full pool flow, so all water is treated with each pass.

The benefits of UV as secondary water treatment are the improvement in water quality resulting from continuous destruction of chloramines, and the corresponding improvement in air quality. There is also a fast kill of chlorine resistant pathogens, and some improvement in filter efficiency.

Typically UV systems will cost about one third of the price of Ozone systems, which they would replace, and maintenance is much simpler. UV Systems produce no chemicals so no gas detectors, or vented isolating rooms are needed. Like ozoneators they will consume lots of electricity adding a few thousand dollars per year to power bills. The good news is that where you need this equipment the most, for the hot tub or whirlpool, you have the smallest flow, and therefore the smallest and cheapest UV System. The hot tub is typically the biggest source of chloramines and smell in the aquatic facility and treating it successfully normally improves the whole facilities air quality.

UV Systems come as packages. The actual UV chamber, which gets plumbed into a bypass pool return line, (so it can be isolated for service), the electrical control panel, and the in line strainer, (to capture any glass should the quartz tube surrounding a light bulb break). Typically budget about one third of the cost of the system for installation, electrical and plumbing.



Model ECF



Model SP



Model ECP

Note: A quartz tube separates the lamp from the water. Glass is not used because UV will not pass thru glass.

Note: The Seal kit contains; Quartz sleeve seals for 4 seal changes, end cap seals, UV monitor seals, wiper blades, wiper shaft seals, wiper drive belt, and main flange gaskets.

Item #	Pipe Size	Model #	Lamp qty-kw	Flow GPM	Price
12 50 01	2"	SP-13 -4	1 X 1.3	100	\$13,642.20
12 50 02	2 1/2"	SP-25-4	1 X 2.5	140	\$14,476.80
12 50 03	3"	SP-25-4S	1 X 2.5	210	\$14,476.80
12 50 04	4"	SP-25-6	1 X 2.5	365	\$17,784.00
12 50 05	6"	SP-25-8	1 X 2.5	500	\$20,299.50
12 50 06	6"	SP-50-8	1 X 5.0	800	\$26,968.50
12 50 07	8"	SP-50-10	1 X 5.0	1145	\$27,674.40
12 50 08	4"	ECP-110-4	1 X 1.0	114	\$9,750.00
12 50 09	5"	ECP-113-5	1 X 1.3	176	\$13,000.00
12 50 10	6"	ECF-215-6	2 X 1.5	580	\$24,078.60
12 50 11	6"	ECF-220-6	2 X 2.0	800	\$26,539.50
12 50 12	8"	ECF-220-8	2 X 2.0	930	\$26,110.50
12 50 13	8"	ECF-225-8	2 X 2.5	1370	\$28,337.40
12 50 14	10"	ECF-230-10	2 X 3.0	2300	\$30,329.21

For Larger Sizes and Flows Please Enquire. Prices are FOB Vancouver.

PARTS FOR UV TREATMENT SYSTEMS

Item #	Model #	Lamps (each)	Quartz Thimble	Seal Kit
12 51 01	SP-13-4	\$565.00	\$508.00	\$102.85
12 51 02	SP-25-4	\$653.00	\$612.00	\$102.85
12 51 03	SP-25-4S	\$653.00	\$612.00	\$102.85
12 51 04	SP-25-6	\$653.00	\$612.00	\$106.00
12 51 05	SP-25-8	\$653.00	\$622.00	\$116.95
12 51 06	SP-50-8	\$803.00	\$792.00	\$116.95
12 51 07	ECP-110-4	-	-	-
12 51 08	ECP-113-5	-	-	-
12 51 09	ECF-215-6	\$565.00	\$105.00	\$135.00
12 51 10	ECF-220-6	\$605.00	\$130.00	\$135.00
12 51 11	ECF-220-8	\$605.00	\$130.00	\$135.00
12 51 12	ECF-225-8	\$653.00	\$153.00	\$135.00