

UV

VGE Pro UV INOX System

REACTORS

INOX

The high quality 316L stainless steel reactor of the VGE Pro INOX series have been designed to perform. After the high quality welding process the units are leak tested. After this process they get a pickling and passivation treatment which drastically improves the corrosion resistance and lifetime of the unit. Another last treatment with glass pearls (shot peening) gives the units a nice, matt grey surface.

FEATURES

- Prevents the release of harmful UV-C radiation
- Changing the UV-C lamp with water in the system
- Resistant to corrosion
- Splash proof
- Visual inspection for operation of the lamp
- Clamping system for optimal seal function
- Lamp replacement without tools

VGE PRO UV-C CONTROL UNITS

Each VGE Pro UV-C disinfection system is equipped with a control cabinet. There are several control units which can be combined with a suitable VGE Pro unit and several other options like a temperature sensor and a flow switch.

UV-C & TEMPERATURE SENSOR

VGE Pro UV-C units can be equipped with a UV-C & temperature sensor. These digital sensors can be delivered in teflon (only the UV-C sensor) or stainless steel. The VGE Pro control monitors are designed to work with these UV-C & temperature sensor

VGE PRO INOX

Model	Reactor shape	Max. pressure	Connection	Capacity (1)	Quality water (2)		
					Good	Medium	Bad
400-54	Z	6 [bar]	1"	18 [m ³ /h]		✓	✓
40-76	L	6	3/4"	3	✓	✓	
75-76	L	6	3/4"	6			
140-76	U	6	1 1/2"	12	✓	✓	
200-76	U	6	2"	17	✓	✓	
75-114	U	6	2"	10	✓	✓	
140-114	U	6	2"	20	✓	✓	
200-154	U	6	DN80	38	✓		
420-168	U	6	3"	78	✓	✓	
400-204	U	6	DN100	92	✓		
600-219	U	6	DN125	140	✓		
975-306	L	6	DN250	306	✓		
1950-306	L	6	DN250	600	✓		



SMART PIN TECHNOLOGY

The VGE Pro UV-C disinfection systems are equipped with the unique Smart Pin Technology (SPT). This innovative system is a reliable way to integrate the UV-C lamp(s) in a safe, efficient and smart way in a reactor. The SPT makes it possible to replace the lamp safely, although the system is filled with water and pressurized.

ADVANCED OXIDATION PROCESSES

Advanced Oxidation Processes (AOP): are chemical treatments to reduce organic and inorganic components from water via oxidation. AOP's use the oxidative power of the hydroxyl radical ($\bullet\text{OH}$), which has the second best oxidation potential and is the strongest oxidiser that can be used in water. The process converts the contaminant materials to a large extent in stable compounds such as water, carbon dioxide and salts, i.e. they are mineralized. In general, when used in the correct way, AOP's can significantly reduce the COD and TOC levels in your water. In general it is advised to apply the AOP as final treatment step in a water treatment system so that all natural present scavengers of the hydroxyl radical are reduced as much as possible, especially bicarbonate ions (HCO_3)

PRO-UV-C CONTROL UNITS

For the VGE Pro UV-C systems 4 different control units are available, knowing: Basic, control timer, control monitor and control monitor Plus. The Basic version is suited with an electronic ballast to drive the lamp(s). The control timer has additionally a LED display for showing the operational lamp hours. The control monitor has a colour display and an optional UV sensor can be connected for monitoring the treatment process. The most complete control panel is the control monitor Plus. A UV sensor, temperature sensor and a flowswitch can be connected and the control unit has alarm and warning functions built-in.

Note: Manufactured by Blue Lagoon, Netherlands