

## HydraScape Skid-Mounted Filtration Systems

The HydraScape Skid-Mounted Filter System combines efficient heavy solid waste filtering and effective UV sterilization with automatic operation to increase performance and reduce labor costs.

Each HydraScape System offers commercial-grade corrosion resistant components, quality assembly, strong platforms and the systems are shipped ready for installation.

Supplement Sand Media with EA's exclusive FilterClay.



### Advantages:

- **Centralized "Controller/Monitor" Command Center**, controls auto backwash and UV system operation based on operator inputted commands.
- **NEMA X4 Rain-tight Power Enclosure** featuring: External Pump and UV Power Switches, External Backwash Alarm LED, corrosive resistant fiberglass construction.
- **Automatic Filter Operation**, reduces routine manual labor.
- **Germicidal Safeguard** provides protection against harmful waterborne bacteria and nuisance algae. Each HydraScape system features a precisely matched (based on flow rate) UV that delivers a minimum UV dose of 30,000  $\mu\text{Ws}/\text{cm}^2$  (required UV dose for waterborne algae/bacteria).
- **VSE High Output UV System** features a commercial design, durable construction, easy "single-end" quartz sleeve/lamp access, and efficient multi-lamp array that utilizes the lamps UV output to its maximum potential. Long-lasting T6 High Output UV lamps provide an exceptional useful lamp life of 80% efficient at 9,000 hours of continual operation.
- **PSP/HRV Filters** available in sizes up to 48" at a maximum operating flow rate of 300 GPM. Spun-wound fiberglass and internal bladder resists fracture due to sudden pressure changes.
- **PSP/HRV Filter Lateral Design** features either "Dual Lateral" (30" & 36" models) or "Snowflake" (42" & 48" models) Lateral Design maximizes media bed filtering and backwashing. Large-slot Filter Laterals available on all models.
- **HydraScape Systems are Factory Tested & Turn-key**; each system is electrically and hydraulically tested before leaving our facility. Each HydraScape System arrives on site ready for installation.



Controller/Monitor



HydraScape Skid-Mounted Filtration System



Watertight Electrical End of HO ML UV Sterilizer



Dual Lateral System



FilterClay Media & Filter Internal



**Optional FilterClay Media** better suited for heavy solid waste applications than fine sand, resists media bed caking/channeling...a problem commonly associated with fine sand media. FilterClay pellets are (4-8 mm)...larger than sand yet lighter, more capable of providing a more complete cleaning of the filter bed during the backwash cycle. FilterClay's porous skin and core provide an exceptional environment for colonizing nitrifying bacteria.

**Controller/Monitor Command Center**

HydraScape Skid-Mounted Filter Systems are operated using the systems Controller/Monitor Command Center. Operating commands are inputted by the operator into the Controller/Monitor's microprocessor. The Controller/Monitor is integrated into the HydraScapes protective NEMA X4 Power Enclosure.

**Pump & Filter Control** - The Automatic Backwash Valve receives operating commands inputted by the operator from our HydraScape Controller/Monitor that include:

Pump Control – Controller turns pump on and off during valve cycles (filter, backwash and rinse).

Backwash Cycle Pressure Switch set up initiates backwash based on pressure inside the filter. Backwash by Timer Initiation capability allows setting for between 3 and 168 hours.

Backwash & Rinse Cycle – Based on operator command inputs, backwashing (1 – 10 minutes) and rinse duration (30 – 300 seconds) is set.

Backwash Counter provides history that identifies backwash frequency.

**UV** - The HydraScape Controller/Monitor is equipped with our basic UV Controller/Monitor features that include:

- \* "Lamp Status Screen" provides lamp operating (on/off) status.
- \* "Lamp Hours Screen" displays total lamp operating hours for each individual lamp.
- \* "Voltage Range Screen" displays "factory-set" voltage set points as well as actual voltage. When voltage falls outside of the set-points, the UV shuts down automatically.
- \* "Water Temperature Control" (Over Temperature Shut-Down) monitors water temperature inside the UV, shutting it down if the water temperature exceeds the factory set set-point of 120 °F. Protects the UV from damage due to overheating.
- \* Output Data Ports send data or alarm information to external sources.

**Options**

UV Lamp UV-C Output Intensity - The UV Intensity Meter reads in percent lamp output, 0% to 100%, with an alarm trip set-point anywhere on the scale. Allows operation of two sensing probes (one probe included, the second probe must be purchased separately).

**Customizable**

Customize your HydraScape Filter System with the Ozone Generator and/or "UV Controller/Monitor" options. The photo at right shows a 36" HydraScape Filter System with a 7.6 gram per hour ozone generator, oxygen concentrator, ozone contact manifold and the "UV Controller/Monitor".



UV Controller/Monitor



Automatic Backwash Valve



COM9036-320 w/Ozone



HydraScape Inlet & Outlet

**Design / Workmanship**

HydraScape Systems are designed to operate efficiently in a confined space. Plumbing assembly is clean and tested for water leaks. Inlet, Outlet and waste effluent are located at the front of the skid within inches of each other, reducing excess plumbing. Anticipate a high level of workmanship that will deliver years of dependable service!

**HydraScape Specifications Chart**

Model No.	Filter Description	Aprox. Media	UV Sterilizer Description	Auto Backwash Valve Description	Main Pump	System Flow Rate	System Dimensions L x W x H	System Input Voltage / Amps
COM9030-240	30" Dual Lateral	500 lbs.	240 W/3-80W Lamps	2" Man. Override	1.5 HP.	100 GPM	60" x 48" x 60"	220-240V 60Hz. / 15
COM9036-320	36" Dual Lateral	800 lbs.	320 W/4-80W Lamps	2" Man. Override	3 HP.	150 GPM	60" x 48" x 60"	220-240V 60Hz. / 20
COM9042-480	42" Dual Lateral	1400 lbs.	480 W/6-80W Lamps	3" NO Man. Override	5 HP.	200 GPM	72" x 48" x 70"	220-240V 60Hz. / 25
COM9048-640	48" Dual Lateral	2100 lbs.	640 W/8-80W Lamps	3" NO Man. Override	7.5 HP.	300 GPM	96" x 72" x 70"	230V 60Hz. 3 PH. / 25

**Note:** System flow rate delivers a UV exposure of 30,000 µW-sec/cm<sup>2</sup> based on 90% UV transmittance and end of useful lamp life lamp condition