



Adiabatic Wars Comparing Evaporative Vs. High Pressure

As some of you might have heard, Neptronic will soon be introducing a new high pressure atomizing humidifier called SKH. This makes a lot of people wonder what will be the main differences between this system and the SKV evaporative humidifier when it comes to selecting them for a project.

Each of these systems has their own characteristics that make them better in particular applications. Here are some of the main advantages and considerations of each system to help you better understand how they work and make the right choice when the time comes.

SKV POSITIVE	SKH POSITIVE
<ul style="list-style-type: none"> Operates with standard water Highly efficient - most water is evaporated Can be located immediately upstream of other AHU/duct components; moisture eliminator required (additional space and pressure drop). Lower equipment cost than high pressure atomization 	<ul style="list-style-type: none"> Accurate control as adiabatic process stops when demand signal stops Very reliable due to maintenance limited to RO membrane and softener Very reliable as easy to offer N+1 redundant pumps or station No odors if RO water holding tank has UV sanitation or periodic drain
SKV CONSIDERATIONS	SKH CONSIDERATIONS
<ul style="list-style-type: none"> Possibly lower RH accuracy due to dry out period Possibly lower RH accuracy due to continued adiabatic process even after demand signal stops (media still dries) Possible odors Maintenance to replace wetted media 	<ul style="list-style-type: none"> Requires demineralized water; higher first equipment and operating cost 20-40% water waste due to evaporation efficiency Large system footprint Higher equipment cost vs. SKV

To learn more about both systems, visit our [website](#).