

# Let's Talk Filtration

## Clean Water Begins Here.

While filtration is a major component in hot tub design and customer satisfaction, understanding the “how’s and why’s” can be a mind boggling exercise. It is a balance for manufacturers to find the fine line between cost and performance, having to make the choice what is in the best interest of the customer, and their own bottom line. Several basic variables play into the performance of a filtration system:

- **Filter Pump:** There are two common types of filter pump designs. One, is a small “circulation” pump operating 24/7 at a low pressure with 3/4” plumbing, the other is utilizing the low speed of a two speed jet pump with 2” plumbing to filter on a programmable schedule. Our belief is why purchase and pay energy costs on an additional pump when the low speed of your jet pump provides optimum filtration.
- **Filtration Time:** Maintaining sanitized water is in direct relation to amount of use and number of users. With programmable filtration, time can be scheduled based upon need rather than 24/7 regardless of use. Save energy and customize filtration time to meet your use.
- **Filter Cartridge:** Is bigger better? Not necessarily. The 25 sq. ft. cartridge actually filters more efficiently than a same height 50 sq. ft. The pleats in the 50 sq. ft. are extremely tight as opposed to the 25 sq. ft. that are more open, allowing flow through each pleat rather than around the circumference, as is the case in the 50 sq. ft. cartridge.
- **Filter Position:** Here is the real question. This is the most important feature to consider for optimum filtration. Is it better before the pump, a suction-side position whereby the water is pulled through the filter OR after the pump whereby pump pressure pushes dirty water through the filter? The answer is obvious, there is far more pressure in pushing than pulling. Pressure-side systems have a proven higher efficiency rate than those positioned suction-side. (skim filter).

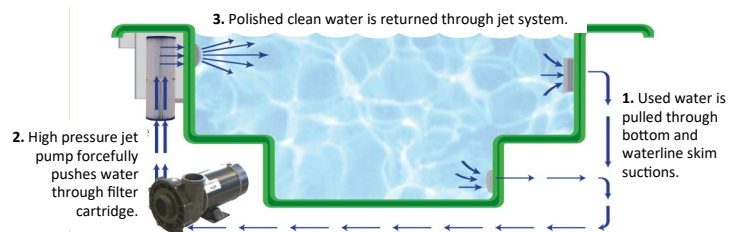
**Suction-side systems**, skim filters, submerge the dirty spa filter in the spa water with you. This puts the dirty filter in full view, and all the gunk collected in them, sitting in the same water as you. That yuck can easily flow back into your hot tub when the jets are off.



The PowerFlo™ design technology, an added manufacturing cost, positions the filter in a closed, pressurized canister. Concealed inside the spa shell, hidden from view, so all you see is polished clean water returned to your hot tub, no muss, no fuss.



Our high-performance jet pump collects spa water through the waterline and bottom suction, forcefully pushing it through the filter's deep pleats, where contaminants and debris are trapped. Suction side systems only pull water from the surface. The PowerFlo™ design assures crystal clear and ultra clean water is returned through the hydro jets.



Unlike continuous-run suction side systems, no water bypasses the filter. The pressure side design of the PowerFlo™ system uses the force of the jet pump for a few hours each day to accomplish what other continuous systems require a full day! That results in less electricity, less wear and tear on the equipment, resulting in cleaner water and your peace of mind.

