Vandermeer Nursery Ltd.

The right and filter size is important for a healthy pond.

Pump selection is based on size of pond, fish load, waterfall size/volume, and your budget. General rule of thumb is pumps rated gallons per hour should be at least half of your pond volume. Factors such as waterfall size and fish load supercede this rule and are the ultimate determining factors when choosing a pump.

Too much filtration is always a good thing, but too little can be a problem. Most filters have limited capacity to the pump that can be used with them. It's a good idea to have a separate pump for your filter and have it run 24/7. Using another pump for waterfalls and fountain heads in conjunction with a timer will be far more efficient.

Mag drive pumps generally use less hydro than waterfall pumps. However waterfall pumps can give you a lot more head pressure. Using a waterfall pump that's too large for a pressurized filter will damage the filter's foam and cause the clean indicator to activate.

As a side note, diverter valves can be used to increase the usability and flexibility of high volume pumps, so that more than one accessory or feature can be run from one pump and the rate of flow can be adjusted as desired.

Pond Filtration

Screens and foam that come with many pumps are too small or designed for water features only, not ponds. Any filter is rated for a pond without fish in it. If you have fish in your pond you need to cut the rating of the filter in half. (eg. A filter rated for a 1,000 gal pond, would filter a 500 gal pond with fish.)

-Acme pre-filters

-Screens prevents debris from getting caught in the impellers

- Pre-filters designed to act as a biological as well as a screen.

-PowerFlow

- Same as Acme, surface area less than a 1 foot Acme prefilter.
- Less visible in the pond.
- Less debris falls off when removing for cleaning.

-Gravity filters

- Lifts dirt out of pond.
- Difficult to hide, needs to be above the surface of the pond.
- Can run for long time without cleaning.
- Has biological filtration
- Can't run to water fall, needs a separate pump.

-Laguna- Rated for ponds up to 1,000 gals.

Biotech 4 – rated for 2,200 gal ponds
Biotech 5 – rated for 2,400 gal ponds
Biotech 10 – rated for 10,000 gal ponds
Biotech 30 - rated for 35,000 gal ponds – includes a bottom drain to remove debris that has settled at the bottom.

-Pressurized Filters

Don't have to go into the pond to clean
Can be run to a water fall
Available with or without U.V. filters.

Bioforce 500 gallon
Bioforce 1000 gallon
Bioforce 2000 gallon

Oase filtoclear

Self cleaning pressurized filter that is easy to clean and backwash.
Filtoclear 1600 gallon
Filtoclear 3000 gallon

Skimmers

Ideal for removing leaves and debris from the surface of the pond. A pump in the bottom of the skimmer directs the water to a waterfall or back to the pond.

They need to be cut into the liner of the pond during installation.
Some smaller models can be installed after pond has been built.

Ultra Violet Clarifiers

Ultra violet clarifiers/sterilizers emit ultraviolet rays onto the water passing through them, destroying the unwanted organic particles.

Ultra violet clarifiers are the most common in water gardening and have the affect of clumping small organic particles together so that they are more easily removed by the filter. This works extremely well on free floating microscopic green algae which cause the water to turn cloudy green. U.V. sterilizers are less common and more expensive. They have a more powerful bulb which is actually capable of killing some disease organisms!

Bottom Drains

Ideal for removing fish waste from the bottom of the pond.
Needs to be cut into the line during installation.

Air Pumps

Provides oxygen for fish and helps to remove toxins from the water.