

Pumps and Filters for In-Ground Pools

Filters and pumps are absolutely essential to proper in-ground swimming pool maintenance. Without such equipment, dirt, debris and other contaminants can accumulate in the water, creating an unpleasant and unhealthy swimming environment. On the other hand, with the help of filters and pumps for in-ground swimming pools, pool owners can enjoy clean, well-circulated water. Of course, in order to get the most out of your pool equipment and to ensure that it functions properly, it's important to purchase filters and pumps that will be a good match for your pool and your maintenance routine. The following information is designed to help pool owners become informed about the various options available when it comes to choosing [filters](#) and [pumps](#) for in-ground pools.

Pumps for In-Ground Pools



Hayward Super Pump

[In-ground swimming pool pumps](#) are the driving force behind pool water circulation. Electrically operated, pool pumps propel water from the swimming pool through the filtration system before sending it back to the pool through the return port. Pool owners will typically run in-ground pool pumps for anywhere from six to 24 hours per day. While operating a pool pump less often will save electricity, it's important to keep the circulation system running for at least six hours each day in order to keep the pool water clean. For pool owners who do not wish to run their pump 24 hours per day, there are swimming pool pumps available that come with timers for easy and convenient use.

What to Look For

When purchasing [pumps for in-ground pools](#), there are certain features which pool owners may wish to look for. For example, good efficiency ratings will allow for energy and cost savings. Quiet operation is another great feature as pool pumps are less disruptive when they make less noise. Most importantly, however, swimming pool pumps must be the right size and power. A pump that is too powerful for a swimming pool can cause pipe and equipment damage and can also interfere with proper filtration. If you are unsure about how powerful your pool's pump should be, consult with a pool professional. Once you know the size and power of the pump you are looking for, there are many excellent brands to choose from, like [Hayward](#).

Filters for In-Ground Pools



Hayward Pro-Series Sand Filter

While pool pumps are responsible for circulating pool water, [in-ground pool filters](#) are responsible for removing debris and contaminants from the water. This is a vital task as pool water contaminants have the potential to cause swimmers to contract illnesses and infections. Accumulating debris can also cause dirty, cloudy water that is unpleasant to swim in and potentially dangerous, as reduced visibility makes swimmer supervision more difficult.

In-ground swimming pool filters are available in three main types -- sand filters, cartridge filters and DE filters. While all pool filters perform the same task, each type uses a different filtration media to trap debris. The various types of pool filters also differ with respect to their effectiveness and their maintenance requirements. When selecting in-ground pool filters it is therefore helpful to know which type of filter will provide you with the level of filtration you want while aligning with your maintenance preferences.

Sand Filters

Sand filters (such as [Hayward Pro Series Side-Mount Sand Filter](#)) are currently the type of pool filter most commonly used by owners of in-ground swimming pools. These filters use sand as their filtration media and as pool water passes through the sand beds, debris particles and contaminants as small as 20 to 40 microns are trapped and prevented from returning to the swimming pool. In order to keep sand filters working at their best, occasional backwashing is necessary.

Cartridge Filters



Hayward Star Clear Plus Cartridge Filter

Instead of sand, cartridge filters (such as [Hayward Star Clear Cartridge Filters](#)) use fibrous cartridges to trap debris. These in-ground pool filters provide greater surface area for filtration than sand filters and are able to filter out impurities and debris particles as small as 10 to 15 microns. These filters also exert less strain on pool pumps than sand filters as they can operate at a lower pressure. Cartridge filters also become clogged less easily and do not require backwashing. However, cartridge filters must be cleaned with a garden hose from time to time.

DE Filters



Hayward In-Ground Extended Cycle D.E. Pool Filter

[Diatomaceous earth \(DE\) filters](#) provide the highest standard of water filtration currently available to residential pool owners. With the ability to filter out particles as small as 2 to 5 microns, DE filters are even able to trap certain types of bacteria. The reason why DE filters are able to provide such excellent filtration has to do with the diatomaceous earth powder used as the filtration media. DE powder is derived from the fossilized exoskeletons of diatoms and is a very porous powder with many microscopic nooks and crannies. As water is propelled through DE powder, contaminants and debris particles become trapped in those microscopic pockets.

Since DE filters provide such excellent filtration performance, they are becoming increasingly popular among residential pool owners. However, their popularity also has to do with their low cost of operation. With respect to maintenance of DE filters, these in-ground pool filters are similar to sand filters in the sense that they require periodic backwashing to ensure ongoing effective performance. As is true of sand and cartridge pool filters as well, DE filters are available from many top pool supply brand names.