

How often should the sand in a swimming pool filter be changed?

We recommend changing the sand every five years.

Filter sand has been crushed and is very rough when new. This roughness is what makes the sand efficient at filtering out the particles of dirt in your water. As this roughness is smoothed out - as stones tumble in the filter, wear smooth over time, and the rough areas calcify and clog up - your filter's efficiency decreases.

This is easily seen as the water takes longer to clear when the pool is not crystal clear also means that your system has to run more frequently to accomplish the same task.

Chemical usage is increased as the chlorine is needed to 'burn out' the un-filtered particles

Sand that is not filtering properly allows dirt to penetrate deeper into the sand bed, with the resultant shorter filter cycles and more frequent backwashing

The first step in changing your sand is to remove the old sand

To remove the old sand from your swimming pool filter, you will need to open the filter:

Filters with the multiport valve mounted on top will generally require disconnecting the plumbing running to the valve. If you do not have unions on these pipes, you will need to cut them to remove the multiport valve (*this would be a good time to install unions on these lines to facilitate future service on your filter*).

Filters with the multiport valve mounted to the side will have either a small top which can be removed or an older tank which is bolted /clamped in the middle that can be taken apart.

If your filter is a two-piece tank which is bolted/clamped in the middle, you will have to allow air into the tank to get it apart, taking care of the O ring seal. Once you have pulled it apart, it is an easy matter to dig out the sand.



If your filter has an opening at the top, from either the multiport valve¹ or cover, there are two ways to remove the sand. (*Lids with a number of bolts need special care not to strip or break the bolts*)

The first and easiest way involves filters² that have a plug at the bottom that allows the sand to flow out. This is usually a larger plug and your winterizing drain plug is threaded into it. By removing this plug, you can use your garden hose to wash out the sand from the tank onto the ground.

If you have a single piece tank that does not have the type of drain plug that allows the sand to drain out, you will have to dig out the sand through the top with a cup.

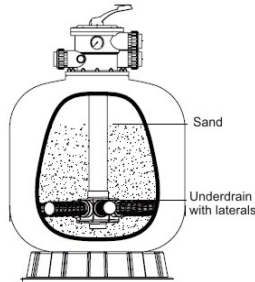
If you have a top mounted multiport valve, there will be a stand pipe directly in the center of the opening. Do not try to push or pull this out of the way. It is very easy to break off the laterals which are connected to this. Dig out the sand with a small cup. Once you have dug out enough sand to expose the laterals, you will be able to move the stand pipe out of the way.

If your valve is side-mounted, you will have an overdrain which fills the opening at the top. This overdrain is removable and, most of the time, simply unscrews. You can then rotate the pipe it is connected to by moving it to the side and out of the way. There are some cases where the overdrain is glued to its pipe. In this case, you will need to rotate the pipe with overdrain out of your way.

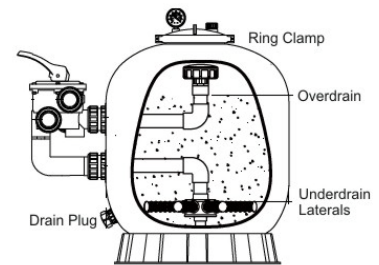
Now dig out the sand

Digging out the sand³ is best accomplished with a plastic cup - not a spade! You need to be careful when digging not to break the laterals of your underdrain. These are fragile and can be easily broken if you are not careful.

Once you have removed all the sand you will need to clean and examine the laterals thoroughly.



Most laterals will unscrew, allowing easy removal from the tank for cleaning and examining. There are some laterals which snap in,⁴ these need a twist to remove and are very much more difficult to remove without breaking.



Older two piece filters, you will be able to remove the entire underdrain assembly in one

piece. In some cases the laterals are glued in, you will not be able to pull them off, so don't try! They break easily.

Be sure to check the laterals for any signs of breakage, and replace them if necessary, always take in the broken piece as a sample as there are a number of different types.

Make sure they are clean inside, You can soak them in a mixture of muriatic acid and water if there is a lot of dirt impacted in them. Be sure to rinse thoroughly afterwards.

Now rinse out the tank and re-install the clean laterals

Now you are ready to replace the sand.

First, replace the underdrain assembly. Making sure the the laterals are tightly in place. Then add water until the tank is half-full. This will cushion sand and protect the laterals, when you put the new sand in.

After adding each bag of sand, reach in and level out the sand bed.

You will need to add as much sand as the manufacturer indicates on the label on the tank. If the label is missing fill the tank to 150mm below the overdrain.

After you have added the proper amount of sand, you will need to reassemble the filter tank and/or multiport valve, We suggest you replace the gasket or O ring at this time.

It is very important that you start the system in backwash mode. This will flush out the dust from the sand and also allow the sand to settle completely around the laterals after backwashing.

1. Old Colliquip filters have screw off lid under the valve which is attached via a union, there is a special spanner available to remove the lid which is often tight.
2. EMAUX Brand filters have this as a standard facility, most local filters don't have a drain.
3. In some cases the sand has calcified and the surface is hard, this can be carefully be broken up with a large screwdriver.
4. SPECK BADU filters have this type of lateral

