T.I.P.
TECHNIK + KOMPETENZ

T.I.P. Technische Industrie Produkte GmbH
Siemensstraße 17
74915 Waibstadt

Tel.: 07263-9125-0
Fax: 07263-9125-25
info@tip-pumpen.de

Swimming pool filter set

Sand filter systems for your pool

The only way to enjoy an unclouded swimming experience is to install a filter system in your pool. Pool filters stop germs and bacteria from accumulating in your swimming pool. A filter system also prevents your pool from becoming a hotbed for algae. It is important to select the right filter that is also suitable for the size of your pool. Here is some information about this important consideration.

Most important tasks of the pump in a filter system

The water pump in a filter has many functions. Its most important task is **circulation**: The pump draws the water from the pool into the filter system, where it is cleaned and flushed back into the pool again. The swimming pool filter set should be capable of completely circulating and cleaning the pool contents twice in about 8–9 hours.

Finding the right filter system

A pump that is the wrong size for your pool can cause a major headache. If the system capacity is too low, then the water will not be fully cleaned, whilst a pump that is too large will consume more power than required, resulting in unnecessarily high costs.

Calculating the right filter capacity

Depending on how much the pool is used and how dirty it gets, pool contents should be circulated twice a day. The recommended operating period is 8 to 9 hours per day. Smaller paddling pools in particular, in which the water stands still for extended periods, can develop into a haven for germs.

By referring to the following example, you can quickly determine how to calculate the right filter capacity for your pool.

Example calculation:

- Your pool contains 20 m^3 of water
- 20 m^3 x 2 = 40 m^3
- 45 m^3: 9 hours = 5 m^3/h

Results:
With pool contents of 20 m^3, you require a filter system that pumps at least 5 m^3/h.

Cleaning
In general, sand filters are easier to clean than cartridge filters, which must either be flushed out or replaced. In order to clean a sand filter it is simply necessary to set the system to “back-flushing”. This works in the following way: The dirty

water usually flows through the filter from top to bottom: the dirt predominantly collects in the top layers of the quartz sand.

If the multi-port valve is then set to “back-flush”, the system will be flushed from the bottom up. The dirt is flushed out via a separate channel and the filter is then normally back to full capacity.

This “flushing process” should be performed at least once weekly. It takes around 2 to 4 minutes. If the pool becomes heavily contaminated during the week, back-flushing may take a little longer. Afterwards, re-flushing should take place again for around one minute.

In addition, back-flushing should always be carried out after cleaning the pool floor or walls, as a large amount of dirt can be swirled up during cleaning and then become stuck in the filter. The back-flushing process should also be initiated if the filter is dirty.

TIP: The pressure in the vessel is displayed on the pressure gauge and it is possible to determine here, whether back-flushing is necessary. If the pressure increases, greater resistance is present in the form of contaminants in the tank. The filter should be cleaned with back-flushing.