

## Arkal Disc Filters - Cleaning and Maintenance of discs

### ◆ General Cleaning

For most of the season it is necessary only to wash the discs with a medium pressure (150 kPa (22 psi) and upwards) hose with clean water. High pressure water blasters (about 11700 kPa (1700 psi)) are not recommended as they may cause damage to the discs. To assess whether the filter is dirty insert a pressure gauge with needle attachment (#161-CN) into the upstream and downstream pressure gauge ports of the filter - when the difference (during flow conditions) exceeds 50kPa (8 psi) the filter is dirty.

1. After checking there is no pressure in the system, loosen the filter cover by removing the fixing nut (1" and 1½" filters, with the help of the filter wrench) or the SS clamp on the 2", 3" and 4" filters.
2. Remove the filter element and loosen the disc set by extending the spine element (where applicable)
3. Hose down the disc set with pressurised clean water.
4. Replace clean discs and tighten disc set accordingly.
5. Apply silicon lubricant (Molycote 111 or similar) to exposed 'o'-rings and the inner rim of the filter body that comes into contact with the seals or 'o'-rings.
6. Re-insert the filter element, replace the filter cover and clamp up.

### ◆ Cleaning with chemicals

**WARNING : Working with chemicals is potentially hazardous! Always exercise care and wear gloves, eye protection, long trousers and long sleeved tops. Ensure a source of fresh clean water is close by.**

It may become necessary to clean the discs with chemicals (chlorine or acid) if scum or slime or carbonate build-up cannot be removed satisfactorily with the high pressure hose. (Pressure differential should be less than 30kPa (4.5psi) in a clean flow situation) Ordinarily this type of treatment should not have to be done more than 2 to 3 times a season.

Carry out steps 1 - 3 as shown above. Remove the discs from the spine/s and thread through the centre of the discs some polyethylene tube (8mm is ideal). Tie a knot in the 8mm tube. The discs are now ready for immersion in the chemical mix.

**Acid** Use hydrochloric acid (approx. 35%) and dilute with caution - always add acid to water, not water to acid. It is usual to use a ratio of 1:5 up to 1:10 (acid:water). The stronger the solution the shorter the time required. The higher the dirt load the more acid/time required. This may require a little trial and error in your own situation.

**Chlorine** Bleach is most commonly used (sodium hypochlorite). The same principles apply as with acid. Dilution rate of 1:5 up to 1:10 (bleach:water)

Both the acid and chlorine are available from swimming pool shops and most large hardware stores.

◆ General notes

1. After chemical treatment wash the discs in fresh water.  
Never use a brush on the individual discs! This is a waste of time and unnecessary.
2. During chemical soaking constantly check on the action of the cleaning agent and stir the solution, and gently shake the discs to ensure all the disc surfaces come into contact with the solution. If the result is not being achieved, extend the soaking time and/or the solution concentration.
3. Check filters in the field should be one grade coarser than the main/automatic filter. Eg. With Netafim drippers the main filter will most likely be 120 mesh (red discs) and the check filters 80 mesh (yellow discs). If this is not the case and the check filters are the same grade or finer than the main filter they will clog up faster and maintenance will be unnecessarily high.
4. If in any doubt about any of the procedures described above please contact your local authorised Netafim dealer or representative.

