

St. Merløse WWTP, Tølløse municipality

Discfilter, HSF2108/6-2F, installed at St. Merløse WWTP, Denmark

In February 2002 one Hydrotech Discfilter type HSF2108/6-2F was installed at St. Merløse WWTP in Tølløse, Denmark. The Discfilter is used as a final effluent step.

In North Sealand, Denmark, local plans for condition of surface waters, as lakes and rivers, are now in place. This has meant stricter regulations on outlet of plants nutrients as phosphorous and nitrogen. From below table, it can be seen that there is a dramatic drop in phosphorous after installation of a Hydrotech discfilter.



Main picture: Oxidation ditch, modified A-channel

Inset picture: Discfilter, HSF2108/6-2F, 18 µm

Plant data

Municipal WWTP, 2000 PE.
Oxidation ditch, vol. 750 m³
(modified V-channel, no separate clarifier). Nitrification; P-removal by simultaneous precipitation.

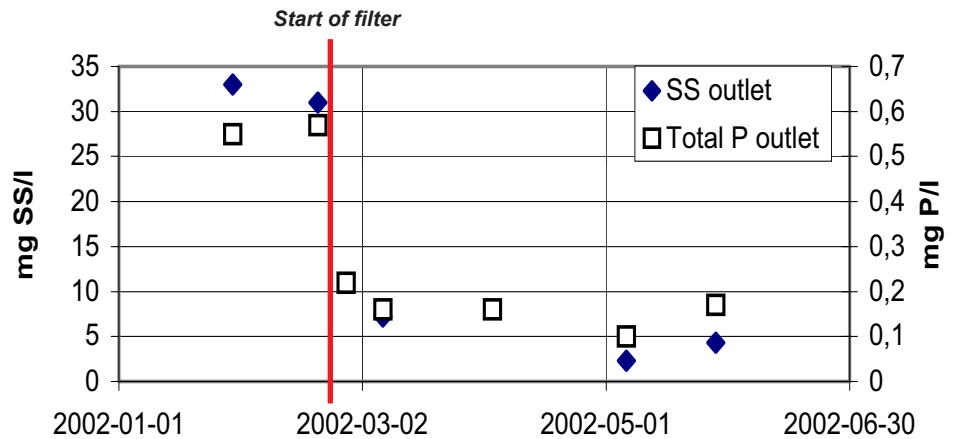
Effluent demands

P ≤ 0,3 mg total P/l
SS ≤ 30 mg SS/l

Flow

Max. dry weather 57 m³/h
Max. during rain, normal 150 m³/h
Max. during rain, extreme 226 m³/h

SS and total P in final outlet, before and after installation of filter.



Filter start on 02-02-26. Drop of SS from 30 mg/l down to 5 in average. Phosphorous level from 0,6 mg/l down to below 0,2 mg/l as an average.