



# HYDROTECH

## Application News

2001-09-28

## Cooling water filtration at Carlsberg brewery

**Drumfilters, HDF1604-1F, installed at Carlsberg's brewery in Falkenberg**



*Carlsberg factory*

In April, 2001 two Hydrotech Drumfilters type HDF1604-1F was installed at Carlsberg's brewery in Falkenberg, Sweden. The Drumfilters were installed on a large buffer tank, made by Hydrotech AB in a raw water intake application. The filters and the tank were delivered as a complete unit with backwash pumps and control system for the operation of the filters.

Previously self-cleaning pressurised filters were used. These filters did not remove enough particles from the intake water and they also had a significant pressure drop over the filters.

After the installation of the Hydrotech filters, the maintenance cost were significantly reduced.

Hydrotech's Drumfilters operates with very low differential pressures. The media is filtered through the periphery of the slowly rotating filter drum. Assisted by the filter elements special cell structure, the particles are care-



*Rinse water pump arrangement*

fully separated from the media. Separated solids are rinsed off the filter cloth into the solids collection tray and discharged.

Careful handling of the solids to prevent fragmentation is essential to achieve high filtration efficiency. Hydrotech's patented design of the filter elements makes this possible.



*Picture showing two HDF1604-1F installed at the cooling water intake from the river*



*Pumps, transporting filtrated water to the cooling water system*

The water is collected from the river Ätran, and lead into the new Hydrotech Drumfilters with a filter opening size of 30  $\mu\text{m}$ . The capacity is normally between 500 - 700  $\text{m}^3/\text{h}$ . Since the installation in April, 2001 has there not been any problems with clogging of the heat exchangers. The filters remove algae's and particles larger than 30  $\mu\text{m}$ .