

## INVESTMENT IN MEMBRANE PROTECTION at Yorkshire Water Treatment Plant

Bollfilter Automatic filters are helping protect Yorkshire Water's ultra filtration membrane plant at Keldgate, East Yorkshire

Over £18 million pounds has been invested in the site, which has been designed for unmanned operation and supplies three quarters of the drinking water requirements for Hull and the surrounding areas each day (120-130,000 cubic metres).

The site incorporates a massive state-of-the-art membrane filtration plant built to comply with the latest EEC regulations. Four banks of primary membranes provide final filtration with a pore size of 150,000 Daltons (0.05 microns), which can remove even the cryptosporidium oocyst (egg stage), which normal chlorine disinfection alone cannot remove.

Boll & Kirch Automatic Pre screens have been installed to protect the membrane plant. Eleven Boll units (6.19 NB200 Low Pressure Auto Strainers) prevent particles reaching the sensitive membrane filters with risk of blockage and damage.

Each Boll filter has been supplied with DWI-approved linings and stainless steel filter elements, with an external water supply employed to assist back-flushing at low operating pressures.

Yorkshire Water are pleased with the Boll installation. "We have had no problems at all with them" said a Yorkshire Water spokesman. Adding, "After commissioning, when the site becomes unmanned, their reliable, low maintenance performance will be even more important."

**Client** Yorkshire Water  
**Contractor** Earthtech  
**System** 11 Boll 6.19 NB200 Low Pressure Filters



TOP. The Keldgate Site has been constructed in the style of a traditional farmyard to blend in with the local countryside.

CENTRE. The Bollfilter Pre Screening installation.

ABOVE. The Keldgate Ultra Filtration Membrane Plant.