BOLLFILTER PROTECTS SUBMERGED MEMBRANE

at Bristol Water’s Banwell Treatment Plant

Bristol Water has upgraded its Banwell Water Treatment Plant in Somerset with the installation of a Siemens Memcor submerged ultrafiltration plant protected by an automatic BOLLFILTER System.

The Banwell Plant, which has a 30 megalitre per day capacity and serves some 120,000 people in Weston Super Mare and the surrounding area, treats water from three local sources: Winscombe bore hole; Banwell Spring and Blagdon Reservoir.

The Memcor Continuous Ultrafiltration (CS) System, which provides a barrier against cryptosporidium, other bacteria and suspended solids, consists of six racks of submerged membrane filtration cells, each containing 240 individual membrane modules. Raw water is drawn through the membrane cell walls and up through fine tubes in each cell to provide filtration to 0.1 micron, with automatic backflushing to maintain filtration performance.

In order to protect the fine membranes in the Memcor CS plant, a BOLLFILTER Automatic System has been installed just a few metres below the holding tank on the feed water line. Three BOLLFILTERs Automatic Type 6.18 SUC filters operate duty/duty/standby to provide continual filtration down to 500 micron, each with an backflush assist pump to ensure effective cleaning under the low pressure conditions.

Banwell Treatment Plant is designed for un-manned operation. BOLLFILTERs Automatic are particularly suitable for such installations thanks to their reliable, self-cleaning operation and minimal maintenance requirements.

**Client**

Bristol Water

**Main Contractor**

Costain

**Contractor**

Siemens Memcor

**System**

3x BOLLFILTERs

Automatic Type 6.18 SUC

300mm

Flow Rate: 630 m3/h

Filtration Level: 500 microns with stainless steel wedge wire filter elements.

Operating Pressure: <1 bar