BOLLFILTER SYSTEM FOR NSAF FILTRATION
at Cranleigh Sewage Treatment Works

A BOLLFILTER System has been installed to protect a new NSAF plant at Thames Water’s Sewage Treatment Works at Cranleigh in Surrey.

The NSAF plant handles all the waste water for Cranleigh, England’s largest village, with an operating capacity of up to 120 litres per second. Following secondary treatment, the waste water is passed through the NSAF system, which uses a biological oxidation process to remove microscopic particles. The NSAF cells contain a biomass with microbes that, when pumped through with oxygen, feeds on ammonia and other contaminants to purify the water.

The BOLLFILTER installation, which comprises an automatic self-cleaning filter with manual filter on the bypass line, is designed to protect small pipework in the NSAF plant from risk of damage or blockages from particulates. As Cranleigh is low-lying, the BOLLFILTER System features a Hidrostal backflush assist pump to ensure efficient performance under the low pressure conditions.

Julian Dempster, Black & Veatch M&E Coordinator, explains the importance of reliable filtration. “The NSAF plant is a continual process. If particulates enter the system they can foul the NSAF media and can cause blockages. The BOLLFILTER System, which operates continually with an automatic backflushing cycle, removes the need for manual cleaning and prevents plant downtime.”

The Cranleigh Plant also has another BOLLFILTER Automatic Type 6.18 fitted on the washwater system to protect nozzles on the inlet works plant from blocking.

**Client**
Thames Water

**Contractor**
Black & Veatch

**System**
BOLLFILTERs Automatic Type 6.18
SUC DN250 with BOLLFILTER
Simplex Type 1.03 Manual Bypass
Flow Rate: 120 l/s
Filtration Level: 6mm with 2D Wedge Wire
Operating Pressure: 0.5 bar