Thames Water’s Sewage Treatment Works in Beckton, East London is the biggest in the UK and one of the largest in Europe, serving 3.4 million people throughout London. The Works, which is undergoing a major expansion programme, features the latest sludge treatment technology, including a sludge powered generator for energy efficient waste disposal.

The sewage treatment process features eight large screens that can operate continually to remove screenings from the sewage. Following primary and secondary treatment, washwater is fed into the screens via a series of nozzles to wash the sludge off and clean the screens and brushes.

In order to prevent the washwater nozzles from blocking and disrupting the screenings separation process, a BOLLFILTER automatic filtration system has been installed in the Beckton Screen House. The system which comprises two Self-Cleaning BOLLFILTERs Automatic Type 6.19 and CCD pumps is mounted on one skid for ease of installation. The BOLLFILTERs Automatic Type 6.19, which operate under low pressure conditions, are fitted to the washwater inlet feed prior to the pumps, with the added benefit of protecting these from possible particulate damage. A small amount of the pressurised washwater is fed back into the filters for efficient cleaning without the need for separate backflush pumps, creating a low energy, space efficient filter/pump solution.

The Beckton filter skid is the second similar installation fitted by Laing O’Rourke for Thames Water. Kevin Woolley, Laing O’Rourke’s Construction Manager explains the choice of the BOLLFILTER Automatic Type 6.19 low pressure system. “We have found Boll Filters to be very good. We installed a similar installation at the Thames Water’s Deephams STW, following problems with two previous filter systems. The BOLLFILTERs have worked well ever since.”

Client  Thames Water
Contractor  Laing O’Rourke
System  2x BOLLFILTER Automatics Type 6.19 DN200
  Flow Rate: 216 m3/h
  Filtration Level: 1mm