Essex & Suffolk Water has installed a Dissolved Air Flotation plant at its water treatment site in Lound, Suffolk to complement a traditional system of slow sand filters and rapid gravity filters.

The plant treats up to 18 million litres a day, using ferric chloride to bring organic matter out of solution. To remove the resulting ‘flocs’, water highly saturated with air is injected into the treated water, bringing the flocs to the surface for removal to holding tanks by a hydraulic desludging process and recycling as a soil conditioner. 90% of the water is pumped for final treatment and chlorination with 10% recycled back into the Dissolved Air Flotation system.

The new plant has been fitted with a BOLLFILTER Automatic Type 6.18 System to remove any fine particulates from the water before recycling it back into the air saturators. The two BOLLFILTERs, which are both designed to take the full flow for separate or parallel operation, have a local control system linked to the main plant control room with automatic alarm facility.

Richard Horton, Earth Tech Project Manager for the new Lound plant explains the choice of filtration system. “BOLLFILTERs were specified for this site as their self-cleaning method was ideal for this application. Thanks to the automatic backflushing, the filters operate continually without need for regular cleaning or maintenance.”

**Client**  
Earth Tech Engineering  
for Essex & Suffolk Water

**System**  
2x BOLLFILTERs Automatic Type 6.18  
Flow rate: Up to 1.8 Ml/d  
Filtration level: 500 micron