

Restoring Capacity at Neaves Lane WwTW

Installation of the McGill Distributor secures full treatment capacity.



McGill Distributor installation at Neaves Lane WwTW

“The McGill Distributor has delivered a faultless solution to unreliable filter bed operation at this works”

Southern Water Field Performance Manager

Scope

Six McGill Distributors were installed to replace existing syphonic driven rotary arms at Neaves Lane WwTW.

Challenge

The work’s compliance was being impacted by unreliable rotation of the existing distributor arms, curtailing treatment capacity in the Filter Beds. Efforts had been made to address this issue, with the filter arm centre columns refurbished. A partial replacement with a traditional paddlewheel solution was attempted but was unsuccessful. Site compliance had been secured through the support of SAF units and a solution was sought that would deliver reliable filter arm rotations within a tight hydraulic profile.

Outcomes

Installation of the McGill Distributors has delivered reliable zero energy rotation for all flow conditions at the works; enabling the disconnect of a supporting SAF unit and reduction of operational costs at the site. Maximum pass forward flow to the filter beds has been increased to 60l/s without surcharge of the primary tank weirs.

