

## KLEERFLO: AUTOMATIC SELF-CLEANING FILTER

### FINAL FILTRATION, SEWAGE WASTEWATER, WASTEWATER TREATMENT PLANT, CAPE TOWN



**Client:** City of Cape Town  
**Industry:** Sewage Wastewater  
**Region:** Western Cape, South Africa  
**Product:** Kleeeflo (various models)  
**Installation Date:** From 2008, Ongoing

### Challenge

- The City of Cape Town operates 19 Sewage Wastewater Treatment Plants. At some plants they re-use final treated effluent.
- Applications include spray water on the dewatering presses, irrigation water for agriculture and recreational facilities, process water for industrial clients and polymer make-up water.
- The final treated effluent contains suspended solids that can block downstream spray nozzles or that are in excess of industrial/agricultural client acceptance standards.
- The City required efficient, in-line filtration that would deliver compliant, uninterrupted water supply to their own processes and to their customers
- Maintenance and downtime needed to be at a minimum.

### Application

- Final Filtration / Spray nozzle protection
- Final Filtration / Industrial re-use.

### Solution

- Design of the Kleeeflo filter is rooted in the principle of inherent simplicity:
  - no rotating parts
  - very few moving parts

- no close tolerance elements
- no electric motor
- high quality, durable, stainless steel wedgewire screens.
- Kleeeflo filters are designed specifically for tough industrial applications.
- On trial 24/7/365 for more than 3 decades and still standing tall.
- Low maintenance- and running costs.
- Long uninterrupted filter runs, efficient filtration and filtrate in compliance with client acceptance standards.
- Integral processing of oversized particles – so no manual pre-screens required.
- Since 2008 the City has installed Kleeeflo Automatic Self-Cleaning filters at 9 of their plants where they re-use treated effluent.
- At **Athlone Wastewater Treatment Plant** the City installed 3 x **Kleeeflo** model **CS5E3** primary filters with 500µm screens and 3 x **Kleeeflo** model **CS3E3** secondary filters with 130µm screens.
- Total peak flow – 1800m<sup>3</sup>/h.

### Results

- The Kleeeflo filters have provided consistent and reliable filtration.
- Filtrate is supplied in compliance with suspended solids acceptance standards set by clients.
- Kleeeflo filters are now specified in preference to disk filters.