

CASE STUDY

KLEERFLO: AUTOMATIC SELF-CLEANING FILTER

FINAL FILTRATION, GLAND SERVICE WATER, PLATINUM MINE, STEELPOORT



Client: African Rainbow Minerals
Industry: Mining
Region: Mpumalanga, South Africa
Product: CS5E2, 2 units
Installation Date: 2007

Challenge

- Mines recycle process water and use some of it for Gland Service Water (GSW).
- The recycled process water may have high suspended solids levels.
- The suspended solids cause damage to equipment.
- Specifically, dirty GSW will reduce the life of the slurry pump stuffing box components and gland packing.
- The mine required an automatic, self-cleaning filter that would provide an uninterrupted supply of service water.
- The requirement was for a filter that would be fit-for-purpose in the tough, uncompromising mining environment.

Application

Final Filtration / Gland Service Water (removal of solids to protect slurry pumps).

Solution

- Design of the KleeFlo 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
- KleeFlo 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.
- The Mine installed 2 x **KleeFlo Automatic Self-Cleaning Filters**, model **CS5E2**, to remove suspended solids.

Results

- The efficient filtration resulted in reduced wear and tear on the gland and shaft seals, reducing maintenance costs
- In 2019 the mine **again decided on KleeFlo** when they needed an automatic self-cleaning filter for a new application (model **CS4E2**).