



Case Study

Mining Industry

River water filtration plant -
21,6 MLD



Problem Statement

The gold mine was experiencing challenges with water pumped from a nearby river for use in critical operations, including cooling of water for pump gland packing, the CIL circuit, elution, eyewash stations, and general process applications. High concentrations of suspended solids were causing blockages in pipelines and equipment, disrupting operations across the site.

Solution

Watericon implemented a containerised self-cleaning filtration plant downstream of a settling pit to remove suspended solids before the water entered the process. Designed to treat 980 m³/h, the system operates at a 50-micron filtration rating, with the flexibility to reduce filtration to 10 microns when required by changing water quality.



Concentrate losses

The self-cleaning function uses approximately 5% of the inline feed water during the clean which is sent to drain.



Performance Target

Filter settled river water down to 50 microns. This can later be adjusted down to 10 microns



Process

6 x VAF V1000 Self-cleaning filters with 50 micron screens connected in parallel.



Innovation

First VAF filters in West Africa