

Sluicer

Rubagabaga, Rwanda

Challenge

Although Rubagabaga is a relatively small river, it transports up to 100,000 tons of sediment annually, including bedload, debris, silt and sand.

The hydropower plant required an effective sediment management solution capable of maintaining desander performance without interrupting power production.



Installation of the SediCon Sluicer system



Desander and secondary intake

Solution

Following a field study, SediCon provided sediment consultancy, designed the desander and supplied a SediCon Sluicer for the 4 m wide and 20 m long desander.

The manually operated system removes sediments simply by opening a single outlet valve, allowing continuous sediment removal without interrupting power production.



Project Location

Project facts

Client: Afritech Ltd Rwanda
Project: Rubagabaga
Location: Rwanda
Technology: SediCon Sluicer
Installed capacity: 400 kW
Annual generation: 2.8 GWh
Design discharge: 0.8 m³/s

Results and benefits

- No production interruptions
- Simple manual operation
- Single-valve control
- No repairs since 2019
- Removes fine sediments and debris
- Low operating and maintenance costs

For more than 30 years, SediCon has developed and supplied proprietary sediment handling technologies from Trondheim, Norway. Our solutions for reservoirs, intakes, desanders and tunnels have been successfully implemented in hydropower projects in more than 20 countries across five continents.