

Sluicer

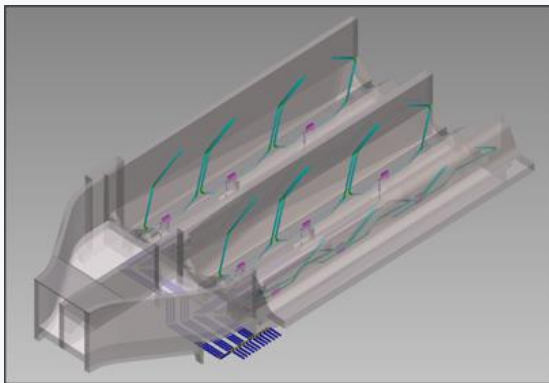
Deralok, Iraq

Challenge

Deralok Hydropower Plant is expected to receive up to 920,000 tonnes of deposited sediment annually. Sediment accumulation varies in both intensity and grain size, with coarse material mainly depositing upstream in the stilling basin. A large-scale sediment management system was required for the desanders and headrace channel.



SediCon Sluicers in the desanders



3D-Model of SediCon Sluicers

Solution

SediCon designed the sediment handling system together with ELC and supplied a total of 16 SediCon Sluicers. Twelve units were installed in the stilling basin and four in the headrace channel to provide continuous sediment removal throughout the intake system.

The installation includes remote operation, sediment level monitoring and automated system control, enabling efficient sediment management with minimal operator involvement.



Project Location

Project facts

Client: FARAB International FZE
Project: Deralok
Location: Iraq
Technology: 16 x SediCon Sluicers
Installed capacity: 37.6 MW
Design discharge: 230 m³/s
Sediment load: 920,000 t/year

Results and benefits

- 16 Sluicers installed
- Designed for 920,000 t/year
- Covers desanders and channel
- Fully remote operation
- Automated sediment monitoring
- Reduced maintenance requirements

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.