

SediCon Sluicers

Dariali HPP Intake, Georgia

Challenge

Dariali HPP is a 106 MW run-of-river hydropower plant on the sediment-rich Tergi River in Georgia. During periods of snowmelt and high flow, large quantities of sediment are transported towards the intake.

Coarse sediment accumulating in front of the intake can restrict flow and reduce intake capacity. An effective solution was required to remove accumulated sediment while maintaining normal power production and minimizing the use of valuable production water.



Dariali HPP intake and SediCon Sluicer installation



SediCon Sluicers removing sediment during plant operation

Solution

SediCon designed and supplied four large SediCon Sluicers for sediment removal at the intake.

Using the available hydraulic head, the Sluicers remove accumulated sediment while the plant remains in operation. Each unit can be operated individually, allowing sediment removal and water consumption to be adapted to actual conditions.



Project Location

Project facts

Client: Dariali Energy
Project: Dariali HPP
Location: Georgia
Technology: 4 x SediCon Sluicers
Installed capacity: 106 MW
Head: 385 m
Design discharge: 30 m³/s

Results and benefits

- Sediment removal during operation
- Maintained intake capacity
- Individual Sluicer operation
- Low water consumption
- Minimal maintenance
- No mechanical sediment handling

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.