

SediCon Gravel Sluicer & Sediment Excluder

Dariali HPP, Georgia

Challenge

Dariali HPP operates in a river system with exceptionally high sediment transport. Coarse sediment, stones and boulders accumulate upstream of the desanders, reducing capacity and interfering with the downstream sediment handling system.

The challenge required a solution capable of handling both accumulated sediment and larger material, while allowing the hydropower plant to remain in operation.



SediCon systems installed upstream of the desanders



SediCon Sluicer discharging sediment from the forebay

Solution

SediCon designed and supplied a combined sediment management solution consisting of a SediCon Sluicer System and a Sediment Excluder.

The SediCon Sluicer removes accumulated sediment hydraulically, while the Excluder handles larger stones and boulders that cannot pass through the Sluicer system. Together, the two technologies provide continuous sediment management and protect the downstream facilities from coarse material.



Project Location

Project facts

Client: Dariali Energy
Project: Dariali HPP
Location: Georgia
Technology: SediCon Sluicer and Sediment Excluder
Installed capacity: 106 MW
Head: 385 m
Design discharge: 30 m³/s

Results and benefits

- Removal of sediment and boulders
- Continuous sediment management
- Protection of downstream facilities
- Reduced manual cleaning
- Low water consumption
- Minimal maintenance

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.