

Desander Dredge

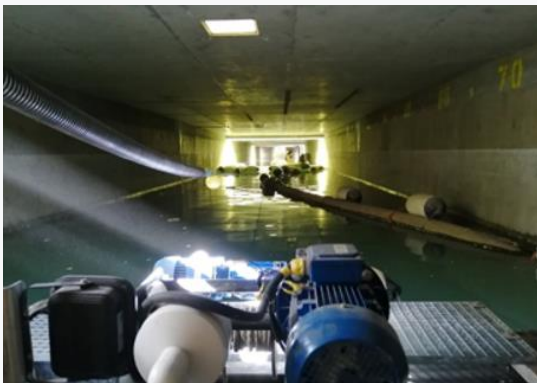
Alfalfal II, Chile

Challenge

Alfalfal II is supplied by rivers fed by snowmelt and glaciers, resulting in highly variable sediment loads throughout the year. Sedimentation increases significantly during summer months, requiring efficient sediment removal to maintain desander performance and protect downstream hydropower infrastructure.



Installation of Desander Dredge in Alfalfal II desander



Desander Dredge during testing

Solution

SediCon designed, supplied and installed three Desander Dredges for the sedimentation basins at the El Volcán intake. The systems remove sediments directly from the desanders while the hydropower plant remains in operation, eliminating the need for drawing down or production interruptions.

With a combined sediment removal capacity of 300 m³/h, the semi-automatic system allows operators to remotely monitor and control sediment management while maintaining optimal desander performance.



Project Location

Project facts

Client: Strabag SpA
Project: Alfalfal II
Location: Chile
Technology: 3 x Desander Dredge
Installed capacity: 264 MW
Head: 1.160 m
Design discharge: 27 m³/s

Results and benefits

- Combined capacity 300 m³/h
- Removes sediment during operation
- No desander drawdown is required
- Semi-automatic operation
- Remote monitoring
- Continuous desander performance

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.