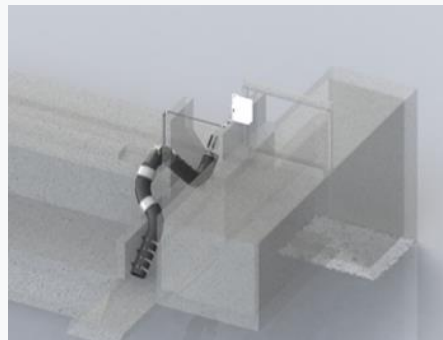


Gravel Excluder

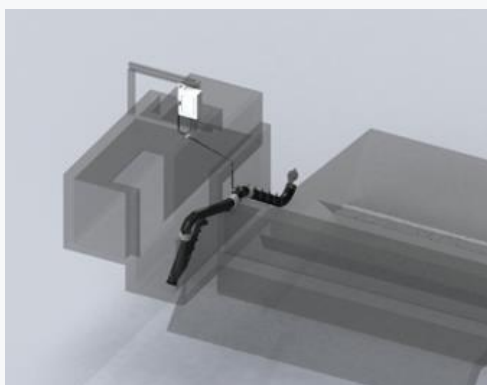
Dos Valles & Palacios, Chile

Challenge

The Dos Valles and Palacios hydropower plants are located high in the Andes Mountains, where rivers transport large quantities of gravel and coarse sediments. Access to both intakes is difficult and often impossible during winter, requiring a reliable sediment management solution capable of operating automatically without operator intervention.



Gravel Excluder at Dos Valles



Gravel Excluder at Palacios

Solution

SediCon designed, supplied and commissioned Gravel Excluders for both hydropower plants. The systems utilize self-priming siphons activated by spill water and automatically remove gravel and coarse sediments during periods of high sediment transport.

The Palacios system removes material up to 300 mm with a nominal capacity of 30 m³/h, while the Dos Valles system removes material up to 500 mm with a nominal capacity of 100 m³/h.



Project Location

Project facts

Client: Pacific Hydro
Project: Dos Valles & Palacio
Location: Chile
Technology: Gravel Excluder
Dos Valles : 12 MW / 395 m
Palacios : 3.8 MW / 170 m

Results and benefits

- Removes gravel up to 500 mm
- Capacity up to 100 m³/h
- Automatic flood operation
- No external power required
- Suitable for remote sites
- 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.