

HydroSuction Dredge

Las Lajas, Chile

Challenge

Las Lajas reservoir serves as a forebay for the 267 MW Las Lajas hydropower plant. Due to its location downstream of the Alfalfal II discharge and within the Maipo River watershed, the reservoir receives large volumes of sediment that must be removed to maintain storage capacity and reliable plant operation.



SediCon HydroSuction Dredge



Pipeline in Las Lajas reservoir

Solution

SediCon designed, supplied and commissioned a HydroSuction dredge for continuous sediment management in the reservoir. The system removes sediments at rates exceeding 200 m³/h and can handle gravel up to 250 mm, debris up to 500 mm in length and cohesive sediments with undrained shear strength up to 25 kPa.

Real-time discharge control allows operators to optimize dredging performance under varying reservoir conditions.



Project Location

Project facts

Client: Alto Maipo Project
Project: Las Lajas HPP
Location: Chile
Technology: HydroSuction Dredge
Installed capacity: 267 MW
Head: 486 m
Design discharge: 65 m³/s

Results and benefits

- Capacity above 200 m³/h
- Handles gravel up to 250 mm
- Removes large debris
- Manages cohesive sediments
- Real-time flow control
- Maintains reservoir capacity

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.