

HydroSuction Dredge

Paso Ancho, Panama

Challenge

Despite its relatively small storage volume of 70,000 m³, the Paso Ancho peaking reservoir receives significant quantities of sand and fine sediments. Frequent sediment accumulation reduced available storage capacity and required regular removal. Existing methods relied on reservoir drawdown, causing production interruptions and loss of generation.



SediCon HydroSuction Dredge and Sediment discharge



Sediment removal

Solution

SediCon designed, supplied and commissioned a HydroSuction Dredge specifically adapted to the Paso Ancho reservoir. The system removes sediments without reservoir drawdown and without interrupting power production.

Despite a limited siphon head of only 6.5 m, the dredge achieved a sediment removal capacity of 42 m³/h during the first day of operation, exceeding the contractual requirement.



Project Location

Project facts

Client: Paso Ancho HPP
Project: Paso Ancho HPP
Location: Panama
Technology: HydroSuction Dredge
Installed capacity: 7 MW
Annual generation: 28.9 GWh
Reservoir volume: 70,000 m³

Results and benefits

- No reservoir drawdown
- No production interruptions
- Achieved 42 m³/h capacity
- Gravity-powered operation
- Operates with only 6.5 m siphon head
- Removes sediment without drawdown

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.