

Sluicer

Cuyamel HPP, Honduras

Challenge

Cuyamel HPP operates with a 53 m long pressurized desander located at the entrance of a 525 m headrace tunnel.

As the plant's only sediment removal facility, conventional flushing requires complete dewatering of both the tunnel and siphon, every maintenance operation leads to an extended shutdown. The subsequent refilling and venting process further increases downtime, resulting in unnecessary production losses and high operational costs.



Pressurized desander during construction



SediCon Sluicer installed in the desander

Solution

SediCon designed, supplied and commissioned two SediCon Sluicers for the pressurized desander. The system enables sediment removal without dewatering the tunnel or interrupting the water supply to the turbines.

Each Sluicer discharges through an individual outlet pipe controlled by a valve located at the outlet tunnel, enabling efficient sediment removal with low water consumption while maintaining uninterrupted water supply to the turbines.



Project Location

Project facts

Client: COHCUY (formerly HECO)
Project: Cuyamel HPP
Location: Honduras
Technology: 2 x SediCon Sluicer
Installed capacity: 7 MW
Annual generation: 22.7 GWh
Head: 133 m

Results and benefits

- No tunnel dewatering
- No production interruptions
- Reduced water consumption
- Reduced civil costs
- Sediment removal under pressure
- In operation since 2007

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.