

# Sluicer

## Solu HPP, Nepal

### Challenge

High sediment concentrations during snowmelt and monsoon periods created significant challenges for the original desander design. With sediment concentrations reaching up to 6,000 ppm, the hydropower plant required an optimized sediment management solution capable of reducing turbine wear, maintaining desander performance and operating continuously without production interruptions.



Upper Solu Headworks



Installation of SediCon Sluicers



Desander

### Solution

SediCon redesigned the original two-basin desander into a single-basin configuration and designed, supplied and commissioned three SediCon Sluicers. The optimized design reduces civil construction costs while enabling continuous sediment removal without interrupting power production.

The three Sluicers have a combined sediment removal capacity of up to 1,000 tons per hour and operate with minimal water consumption.



Project Location

### Project facts

Client: Upper Solu Hydro Electric Company Ltd.  
Project: Solu HPP  
Location: Nepal  
Technology: 3 x SediCon Sluicers  
Installed capacity: 23.5 MW  
Annual generation: 110 GWh  
Design discharge: 12.26 m<sup>3</sup>/s

### Results and benefits

- Capacity up to 1,000 t/h
- No production interruptions
- Reduced turbine wear
- Reduced civil costs
- Low water consumption
- Single basin desander configuration

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.