

SediCon Ejector Dredge

Pump-powered sediment relocation within reservoirs without interrupting power production

How it works

- Uses pumps to power sediment relocation when discharge is at the same level as the reservoir.
- Solids do not pass through the pumps, which reduces wear while preserving hydrosuction benefits.
- Sediments can be relocated 200m away from the dredging area within the same reservoir.
- Reservoir operation and power production can continue while dredging is in progress.



Illustration



Sediment discharge relocated 200m away

Why it matters

- Handles all types of sediments, from cohesive clay and organics to sand and stones.
- Solids do not pass through the pumps, reducing wear and maintenance requirements.
- Enables continuous dredging while reservoir operation and power production continue uninterrupted.
- Zero net water consumption and no reservoir drawdown required.



Principle sketch

Environmental benefits

- Zero net water consumption
- No reservoir drawdown required for sediment removal
- Low equipment wear
- Supports long-term intake and reservoir functionality with targeted sediment relocation
- Reduces the need for more invasive maintenance methods

Best used when

You need to relocate sediments within a reservoir, keep intake areas functional and recover buried structures where gravity-driven discharge is not feasible.

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.