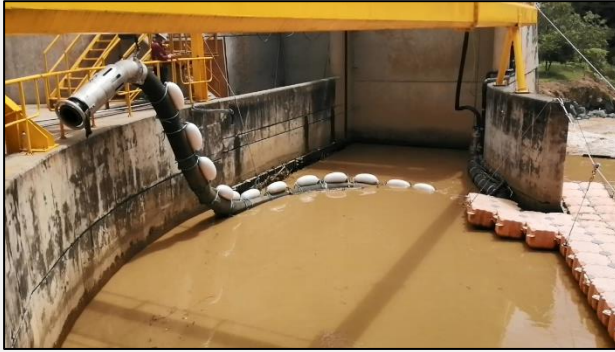


SediCon Dredge for Barroso HPP, Colombia

A compact SediCon Dredge was successfully installed and tested to remove the sediments that are deposited in front of the intake.



SediCon Dredge



Sediment discharge

- Project Description:** Barroso is a 20 MW run-of-river power plant commissioned 2012, with a design discharge of 6.2 m³/s and a total head of 416 m, for an average annual generation of 131.2 GWh.
- Location:** Salgar, Antioquia, Colombia.
- Sediment Challenge:** Barroso river (Spanish for “muddy”) brings large amounts of sediments that are deposited in front of the intake that must be removed frequently to avoid operation problems. Removal used to be done by opening a flushing gate, affecting power generation.
- Solution:** SediCon supplied a compact SediCon Dredge capable of removing sediments from the intake without affecting operation of the power plant. The equipment was designed to handle large particles like gravel and stones, which are frequently deposited in front of the intake.
- Implementation:** The SediCon Dredge was successfully installed and commissioned during the January-February 2021.
- Results:** Testing of the equipment during commissioning showed excellent results, proving that the solution will improve the operation of power plant. During SAT, a sediment removal capacity of 192 m³/h was measured, exceeding by far the contractual requirement.
- The suction head is operated from a travelling crane, while the siphon located over the spillway uses a head of only 3.5 m, powering the gravity hydrosuction system. The SediCon Dredge is also equipped with a submersible pump for water jetting system and a custom-designed priming system by vacuum to easily start operation.

SediCon is the leading supplier of sediment handling worldwide and provides reliable solutions with low water consumption and uninterrupted power production.