

SediCon Dredge for Xacbal HPP, Guatemala

A SediCon Dredge was successfully installed and tested to remove the sediments in the pond.



SediCon Dredge



Water jetting system



Sediment outflow

Project Description:	94 MW run-of-river power plant commissioned 2010. 480 GWh of annual production with a head of 200 m and discharge of 58 m ³ /s. Hourly peaking reservoir with a total capacity of 750,000m ³ .
Location:	Quiché, Guatemala 15°37'25" N, 91°05'00" W
Client:	Hidroxacbal, Grupo Terra
Sediment Challenge:	The peaking reservoir receives a large amount of sand and fine sediment every year. The sediment must be removed frequently to avoid operation problems. Conventional diesel dredge commissioned in 2012 with limited dredging depth.
Solution:	SediCon supplied a SediCon Dredge capable of removing sediments at a maximum depth of 30 m. Equipment is very efficient when water level in reservoir is high. Sediment removal is done without interfering with the power production. The equipment was especially designed to work safely with the plastic lining of the reservoir.
Implementation:	The SediCon Dredge was successfully installed and commissioned by November 2018.
Results:	<p>Special adjustment required to water jetting system (nozzle configuration) to work efficiently with existing sediments. During SAT a capacity of 95 m³/h was measured, exceeding the contractual requirement.</p> <p>The siphon located over the spillway uses a head in the order of 10 m with an efficient gravity powered hydrosuction system. SediCon Dredge is also equipped with powerful jetting pumps being able to work individually or in parallel.</p> <p>SediCon provides training and technical support following client's requirements.</p>

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