

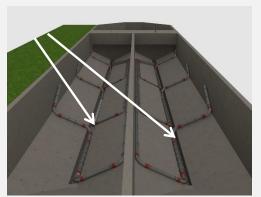
Reference Project 2025

SediCon Sluicer for Hidromontañitas desander, Colombia

The existing desanders designed for conventional emptying and flushing have been retrofitted with improved SediCon Sluicers. The SediCon Sluicer Pipes fixed to sediments are now removed with minimum the bottom of the desander power production.



Hidromontañitas desanders



SediCon sluicer in the Hidromontañitas desanders

Project Description: Hidromontañitas is a 19.9 MW run-of-river hydropower plant commissioned in 2012.

The power plant operates at a head of 416 m and with a discharge of 7 m³/s.

Location: The lateral water intake is situated within the municipal areas of both Donmatías and

Santa Rosa de Osos. Latitude: 6.547836, Longitude: -75.317530°

Client: Celsia, Colombia.

Challenge: During the rainy season, the river carries a heavy sediment load causing rapid sediment

accumulation in the desanders. The previous design required frequent drawdown and

flushing, resulting in significant production losses.

Solution: SediCon have designed, supplied and installed SediCon Sluicer Systems in the

desanders. The new design removes the sediments with very low water consumption and sufficient capacity to maintain desanders during floods exceeding 20.000 ppm concentration. The outlet pipe is directly integrated with the existing flushing gate,

eliminating movable parts and reducing maintenance to an absolute minimum.

Environmental benefits: Sediments are returned to the river under conditions that closely mimic the natural

flow regime, maintaining sediment balance and minimizing environmental impact.

With no need for external power or fuel, the system eliminates spill risk and operates

with an almost zero carbon footprint.

Implementation: Installation was successfully completed in September 2025, ensuring reliable and

sustainable operation.

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