

Gravel Excluder for Stubli RoR Intake, Norway

The SediCon Gravel Excluder at Stubli uses excess water only and automatically removes gravel and debris up to 400 mm and maintains the intake open at all times.



Sediments are removed from two sides



Installation and successful testing in less than one week

Project Description:	Stubli is a 3 MW RoR powerplant with a weir and a small intake pond in a sediment carrying river. The powerplant utilises a head of 230 m, has 3 MW installed capacity and an annual production of 8,3 GW
Location:	15 km south of Narvik, Northern Norway.
Client	Småkraft AS, Norway
Sediment Challenge:	The river carries substantial quantities of fine gravel typically 5-10 mm size. The intake is a shark-cage intake which draws water from three sides. The only way to flush sediments is not possible. Build-up of gravel in front of the trash racks has therefore reduced capacity.
Solution:	SediCon custom designed and supplied a 630 mm (OD) Gravel Excluder with two inlets, capable of removing gravel and debris up to 400 mm in diameter. The Gravel Excluder uses the siphon principle and removes sediments whenever water is spilling over the dam. The operation is fully autonomous, and no water is lost for power generation. (There is pat. pending for SediCon Gravel Excluder technology)
Implementation:	Installation of the Gravel Excluder was successfully completed in September 2023.
Results:	The Gravel Excluder was tested immediately after installation and has worked as intended since. It has also been verified that the Gravel Excluder can easily be started manually if that should be required.

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