

Faculty of Engineering Science and Technology Department of Hydraulic and Environmental Engineering

Tittel	Numerical modelling of rock trap in hydropower plant
Туре	CFD, numerical modelling
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Short description with pictures/Kort beskrivelse med et bilde

Tussa powerplant in Sunnmøre in Norway has severe problems with sediments going into the turbine, which causes abrasion on the runner wheel. There is a rock trap in the waterway, but it is very small and badly designed, and therefore not functioning properly. NTNU is helping Tussa to find a solution for the rock trap problems, and as part of this, the rock trap has been fitted with measuring devices, and it has been LASER-scanned. Now, we want to simulate the rock trap numerically with a suitable CFD suite.

The candidate will use the CFD solver OpenFOAM to simulate the flow through the rock trap and compare the results with the measured velocity profiles.

