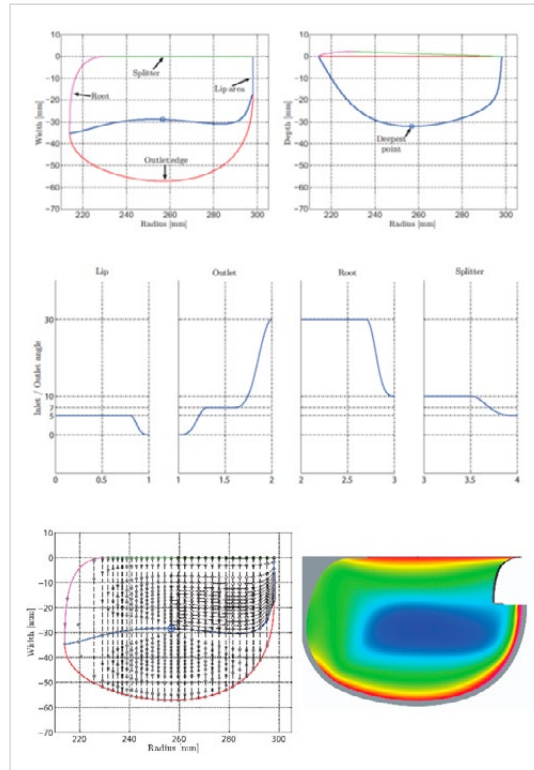


## Background

The Pelton turbine is an old technology, but there are still gaps in the knowledge concerning the flow within the turbine and the flow mechanisms that govern it.

To enable a greater possibility of collaboration within the researchers working on the Pelton turbine an open reference turbine has been designed and is used as the test case for the study of the flow.

The turbine will be fitted with an on board boroscope to enable inspection of the bucket within the rotating frame. The boroscope will be connected to a SA5 High Speed Camera that will make it possible to investigate the flow within the Pelton turbine relative to the turbine. This will again give the possibility to look closely at the flow mechanisms affecting the flow and possibly acquire the stream lines and relative velocities within the flow field.



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## FLOW IN PELTON TURBINES

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