

# CASE STUDY

## FLUID CODES

 SOFTWARE    SUPPORT    TRAINING    CUSTOMIZATION

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## WATER PUMPING STATION

### CHALLENGES

Computational Fluid Dynamics (CFD) modelling was carried out for a Water Pumping Station and their compartments in order to determine flow paths/flow distribution such that an economic design may be conceived and constructed.

### ENGINEERING SOLUTION

CFD modelling of the reservoirs was used to optimize the proposed layout and dimensions and, so, promote water circulation within the reservoir such that stagnant water regions or isolated water pockets were eliminated or minimized.

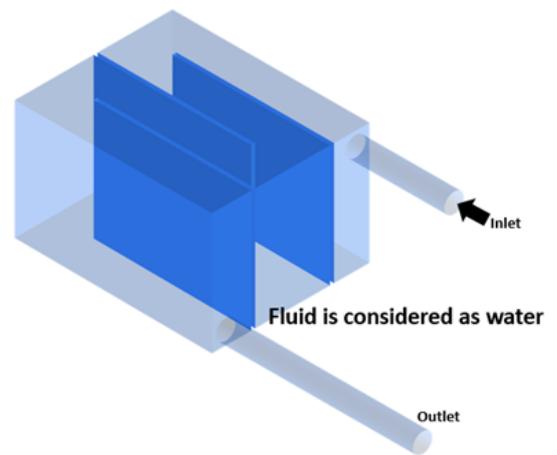


Figure 1. 3D model created in Ansys CAD tool

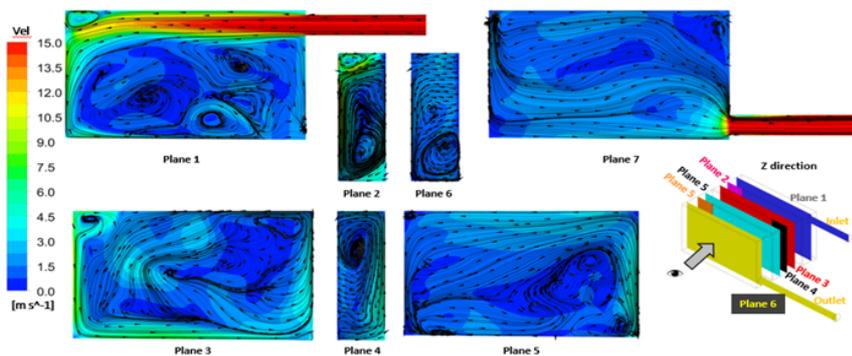


Figure 2. Velocity & Contours on different planes in Z Direction

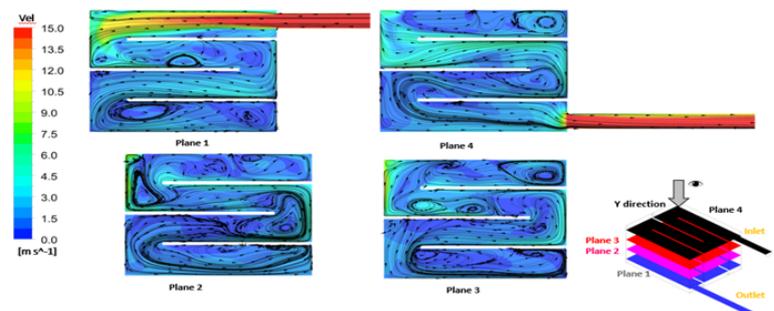


Figure 3. Velocity & Contours on different planes in Y Direction