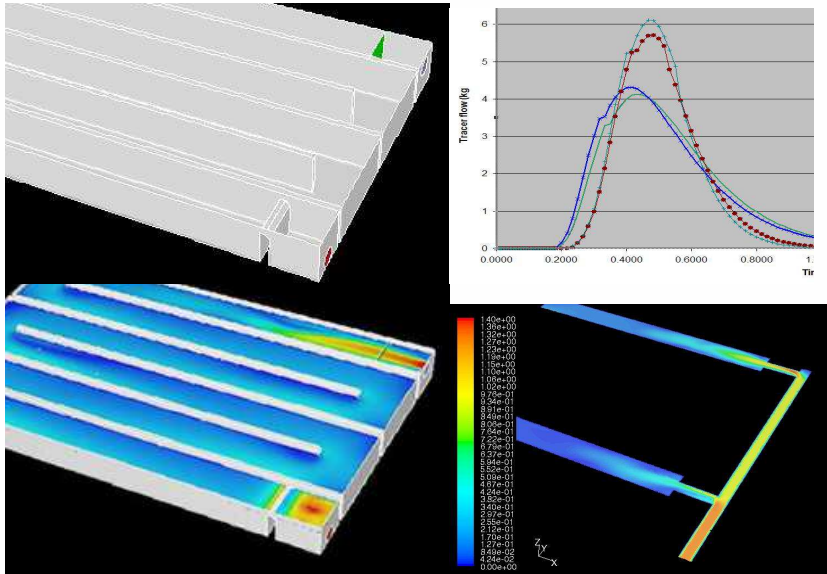


Maundown WTW – Contact Tank Design

Maundown WTW is one of Wessex Water's key water treatment works, supplying 15% of its customers in the South West of England.

Working with Doosan Enpure, two new chlorine contact tanks were proposed.



The designs for the contact tank were tested and optimised with CFD before construction; a standard approach for Wessex Water. The tanks were confirmed to exceed criteria for chlorine residence time, confirming confidence in the preferred design.

Potential concerns with the inlet pipework were also identified at an early stage and the design modified to provide 50% flow split under all operating conditions, without the need for controlling valves.

Additional CFD models for the pipework were identified as necessary and included without extra cost in the project - highlighting The Fluid Group's desire to add value at all stages of each and every project.

The Fluid Group provides expertise in a range of simulation techniques including:

- CFD (ANSYS Fluent)
- Process (GPS-X)

Recent projects using CFD include:

- Kennick Reservoir Spillway Modelling – Dartmoor National Park
- Hornsey WTW Pumping Stations
- Helsinki WwTW Clarifiers
- Boltshagen WwTW Settlement Tanks
- Lound WTW – Northumbrian Water
- Integrated Process/CFD simulation
- Reservoir improvement
- Clarifier optimisation
- Flow split prediction
- Digester mixing, and
- Acoustic modelling

plus ...

air profiling and fluid flow in and around a range of structures: from commercially sensitive turbo-machinery, to new designs in the built environment.

To discuss potential projects, contact us:

**Tel. 0845 055 8571, or
email: info@thefluidgroup.com**

The Fluid Group are specialists in Computational Fluid Dynamics & Process Modelling for Chemical Engineering, Water and Wastewater Treatment.

Dynamic Simulation or Steady State

- Effective selection of the best technique for each job,
- The ability to combine techniques in-house.

Multiphase

- Air, water/chemical & solids modelled simultaneously, standard within our models,

3 Dimensional

- Accurate 3D model of existing structures,
- Model wireframes can be imported from existing 2D and 3D CAD designs,

Fully Inclusive Quotation

- All known options inclusive at fixed price,
- Fast turnover, one-to-one availability,
- No hidden costs.

Animation and still images included

- Images and animation at client's request, all free within the project, for commercial use.

Flexibility and Innovation

- All-inclusive combination with Process and 2D Hydraulic/Network modelling if required.