



# AP DYNAMICS engineering

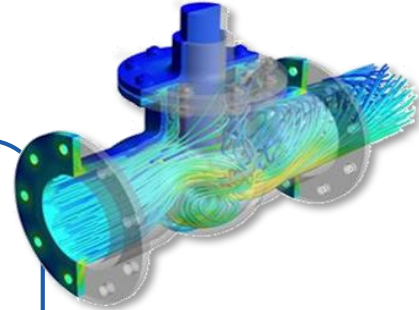
# FLUID MECHANICS

Solving Tough Engineering Problems

**AP DYNAMICS** provides a complete range of **Computational Fluid Dynamic Services to drive products and equipment from concept to reality** whether it be for Forensic Failure investigation, Optimization or New construction.

Our highly skilled engineers allow for solutions to **understand** and to **predict** the **physical behavior** of complex systems. We offer **high quality, cost-effective** and **client-oriented** project services using proven and **state-of-the-art Simulation** techniques.

This is achieved thanks to our experienced CFD engineers specialized in numerical simulation.



## TYPES OF ANALYSIS

- ✓ Heat Transfer
- ✓ Erosion
- ✓ Compressible Flows
- ✓ Acoustical Pulsation
- ✓ Incompressible Flows
- ✓ Multi-Phase Flows
- ✓ Combustion and Emissions
- ✓ Rotating Frames of reference
- ✓ Non-Newtonian Fluids
- ✓ Fluid Structure Interactions (FSI)
- ✓ Advanced Turbulence Modelling
- ✓ RANS, DES, LES

## TYPICAL APPLICATIONS

- ✓ OTSG (Once Through Steam Generators)
- ✓ Gas Compressor and Liquid Pumping
- ✓ Pipeline Transient
- ✓ SAGD Wells
- ✓ Separation Tanks
- ✓ Fan Optimization
- ✓ Combustion Optimization
- ✓ Heat Exchanger
- ✓ Erosion

## SOFTWARE

- ✓ ANSYS<sup>TM</sup> Fluids (CFX, FLUENT)
- ✓ STAR CCM
- ✓ OPENFOAM
- ✓ Bentley PULS
- ✓ Bentley Hammer

