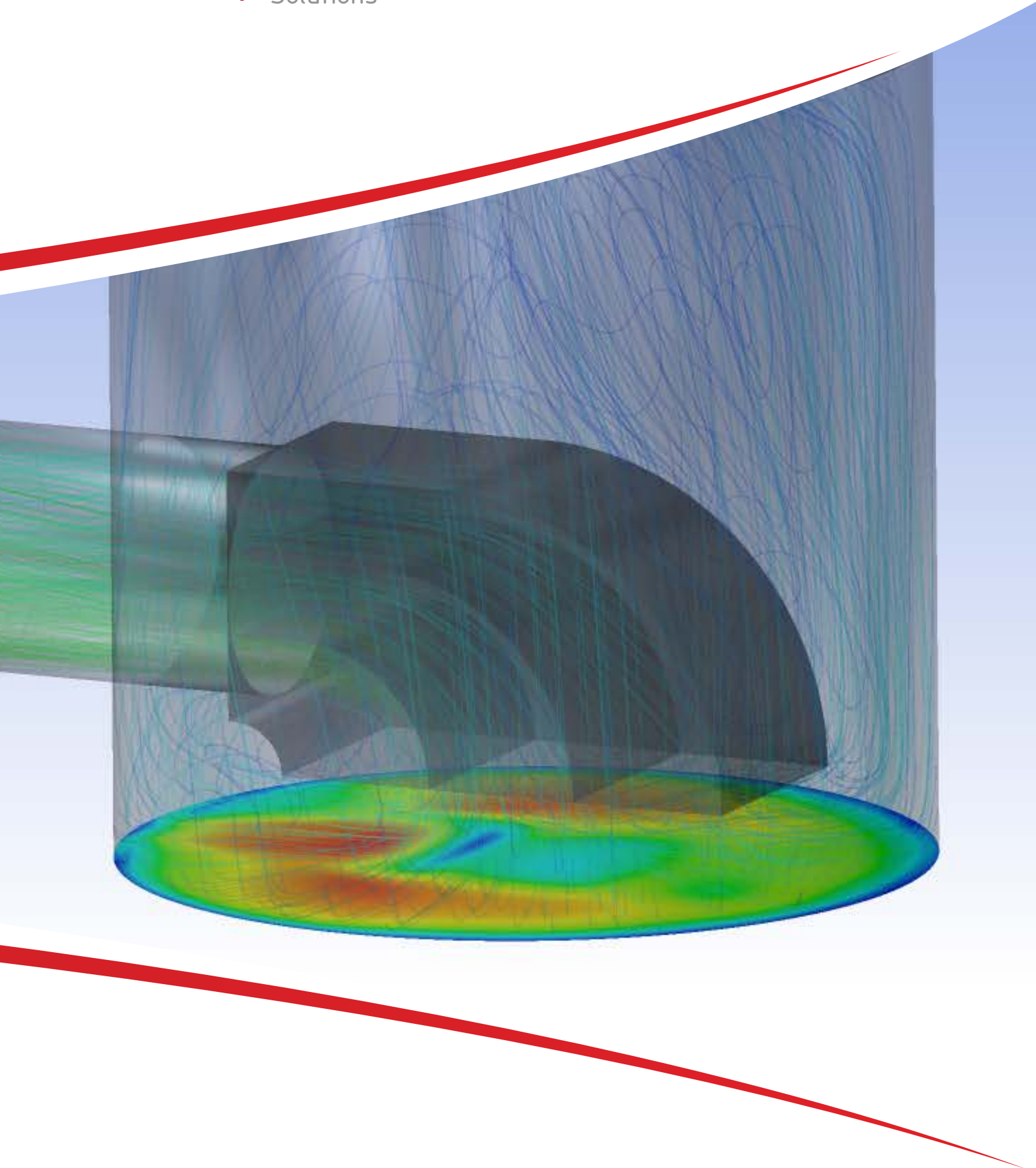


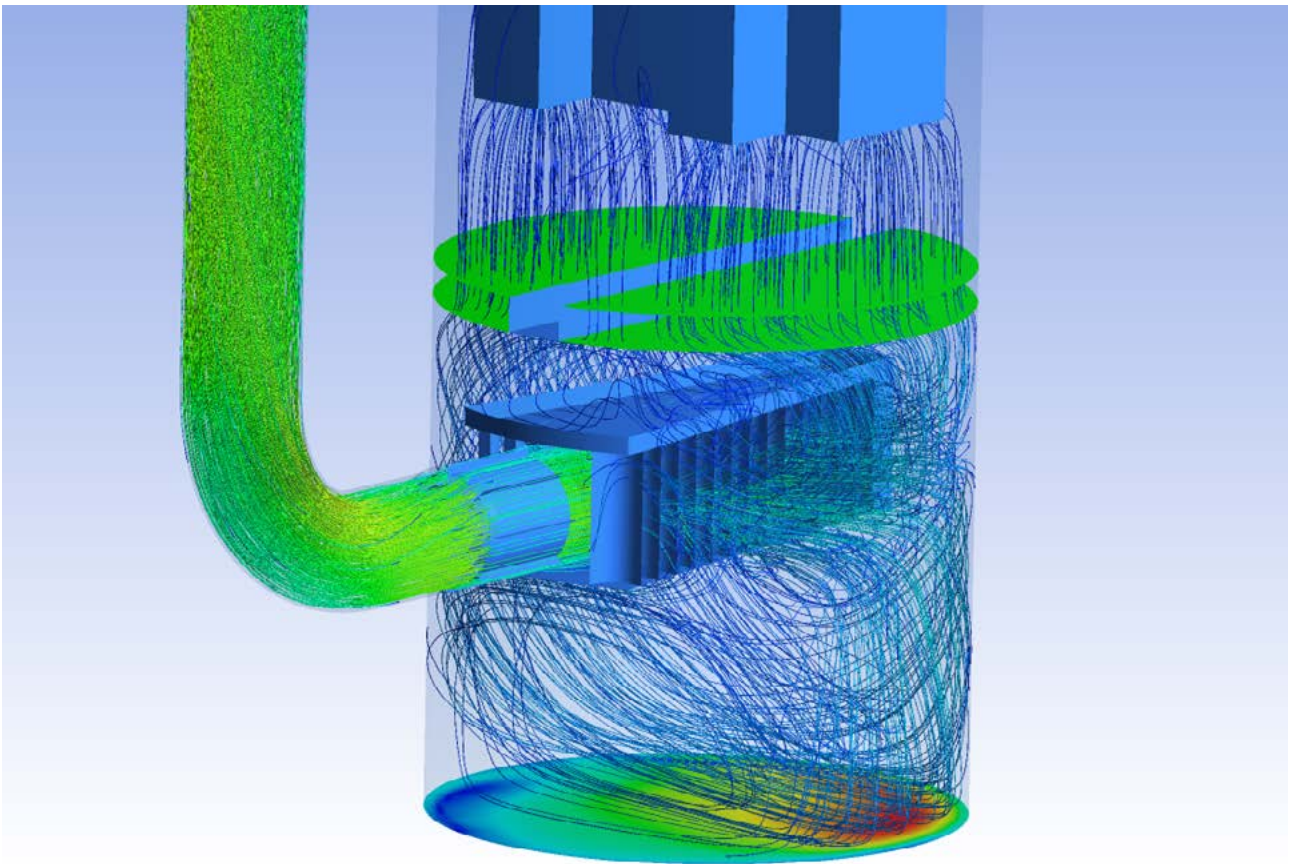


Computational Fluid Dynamics (CFD)



Computational Fluid Dynamics (CFD)

Swift TG Solutions is an integrated engineering consultancy, specialising in advanced engineering analysis and optimised product design. We utilise a range of advanced analytical and simulation methods including Computational Fluid Dynamics (CFD).

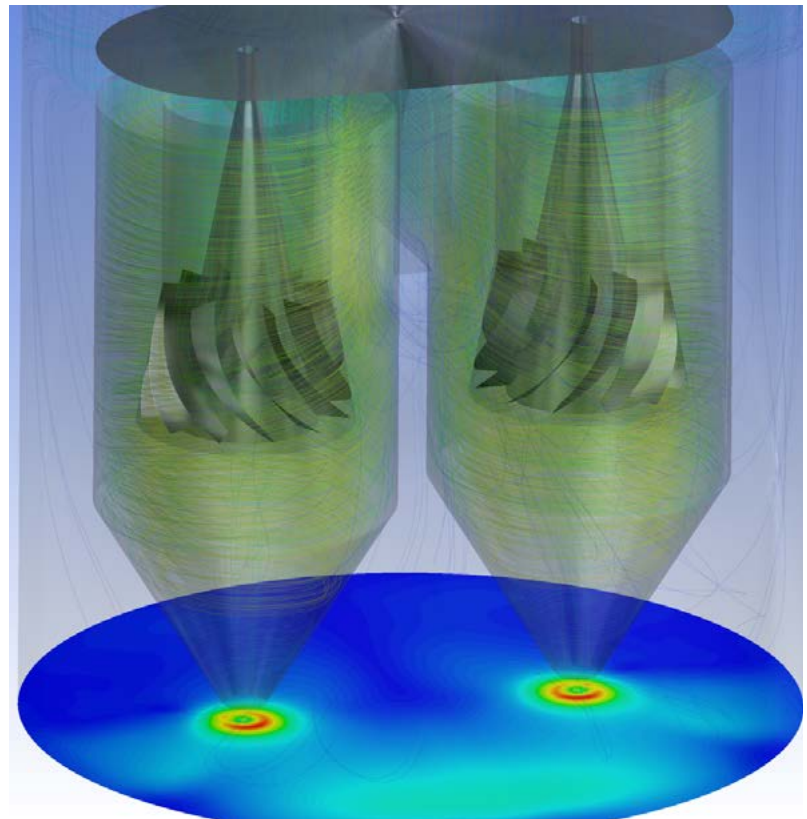


What is Computational Fluid Dynamics (CFD)?

CFD, also referred to as flow simulation, is a computer simulation technique that allows detailed analysis of fluid flow through any product. It allows the fluid mass flow, velocity, density, temperature, pressure, concentration or any derived fluid property to be calculated at all locations within the flow field. The interaction of the fluid with its solid boundaries, such as fluid-dynamic forces and heat transfer rates can also be calculated accurately for use in stress analysis. CFD can be used to: calculate design mass flow rates, pressure drops and heat transfer rates together with fluid dynamic forces - lift, drag and pitching moments.

The power of CFD

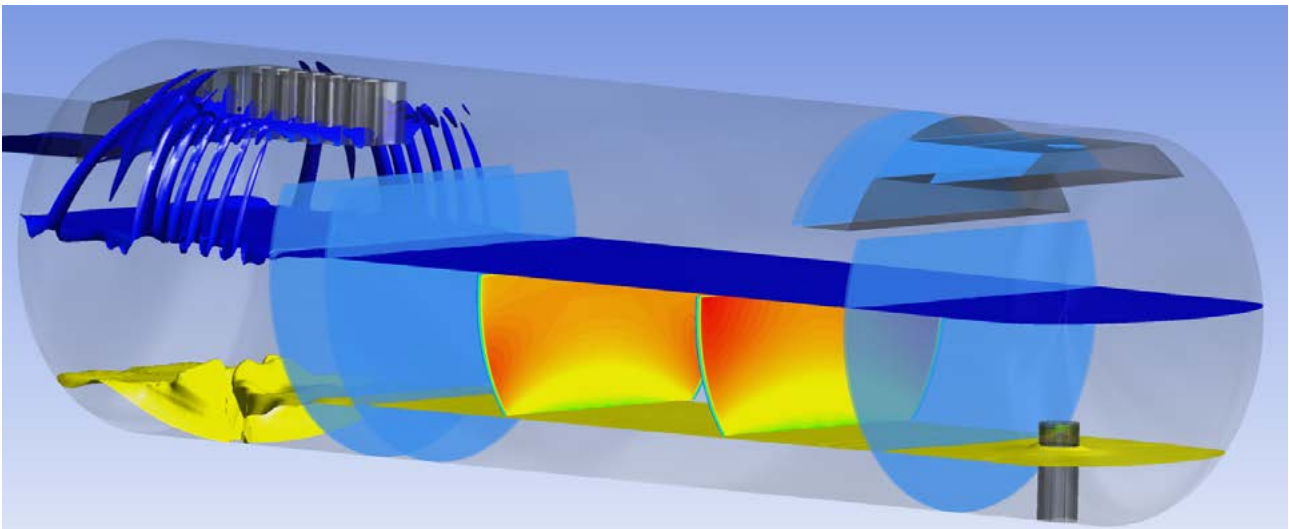
CFD analysis can be used early in the design process to help evaluate, validate and optimise product performance prototype; eliminating problems before they appear and reducing product development time and costs.



Swift TG Solutions CFD Consultancy Services

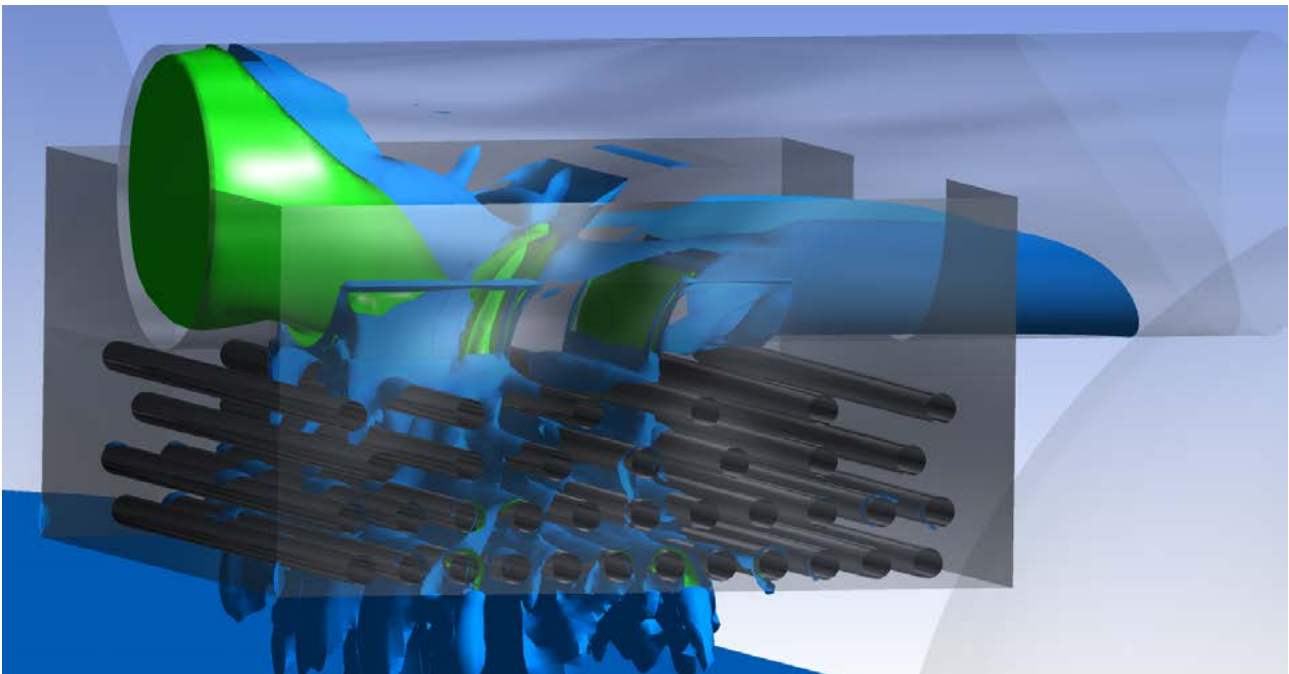
Swift TG Solutions CFD consultancy services include multi-phase flows, heat transfer, hydrodynamics, aerodynamics, industrial fluid dynamics and fluid structure Interaction.

- Calculate system performance
- Test potential design improvements
- Comparing effects of geometry and flow conditions
- Design Validation
- Regulation performance review
- Performance verification
- Clarification of flow mechanisms
- Prediction of scale-up effect
- Support and enhance in-house models
- Technical audits of client or third party models



Why Swift TG Solutions?

Whether you are new to CFD, need detailed CFD analysis or require CFD support, Swift TG Solutions is here to help.



Swift TG Solutions has successfully delivered numerous independent CFD analyses to high profile companies worldwide and our highly experienced CFD engineers have a wealth of experience that spans across a number of different markets.

We are flexible and adapt to our customer's needs offering guidance and advice on all aspects of flow dynamics together with the whole range of CFD consultancy services. Moreover, our solutions are un-biased and can be tailored to our customer's exact requirements and environments.

Swift TG Solutions is Part of the Swift Technology Group

Swift Technology Group is a technology driven organisation that offers complete end to end product development. We are dedicated to supporting industrial skills and capabilities and to creating new, innovative, high quality solutions.

With our industry leading expertise in design, manufacturing, marketing and maintenance we can bring your concepts to market using in house companies to give you results of the highest quality. Whether for the Aircraft, Marine, Automotive, Oil and Gas or Renewable Energies industries, our diverse range of state of the art technologies can deliver advanced solutions by drawing on our years of experience in design and manufacture.

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