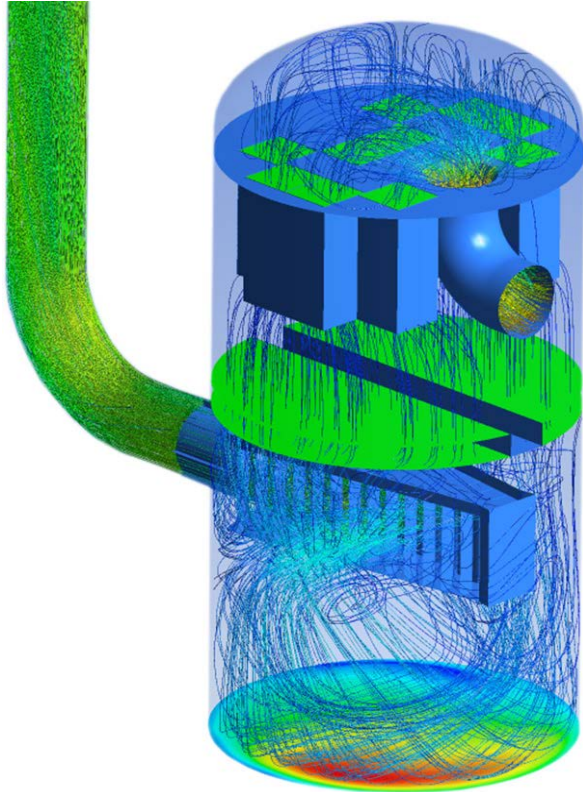


INNOVATIVE
ENGINEERING CONSULTANCY

SWIFT TG PROVIDING SOLUTIONS



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, together with our offerings as a full-service design consultancy, which takes you from concept through manufacture to market.

- Computer Aided Design (CAD)
- Finite Element Analysis (FEA)
- Reverse Engineering
- Concept Drawing
- 3D Visualisation
- Graphic Design and Marketing

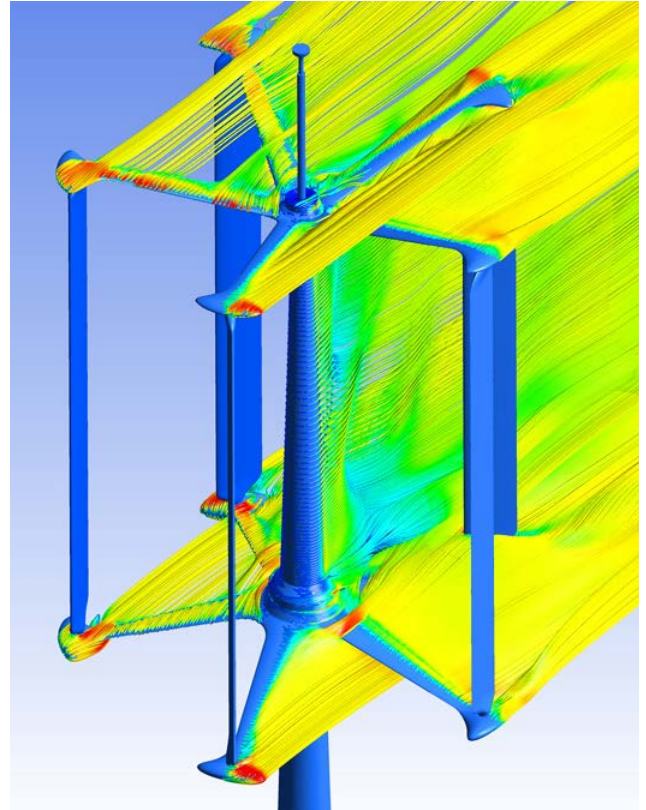
COMPUTATIONAL FLUID DYNAMICS (CFD)

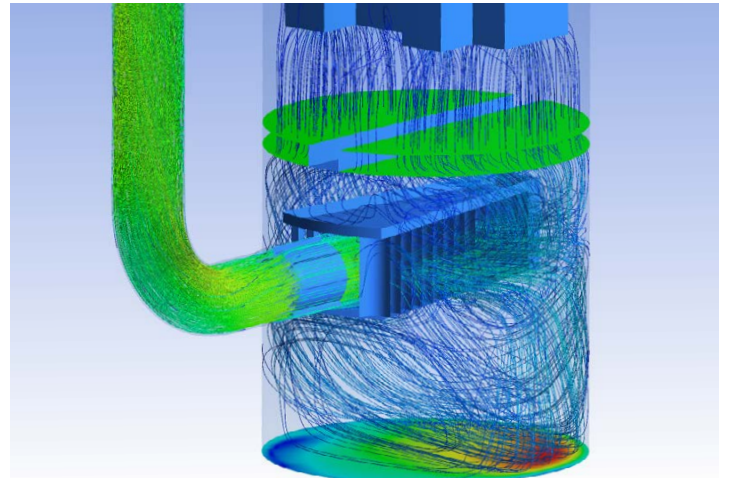
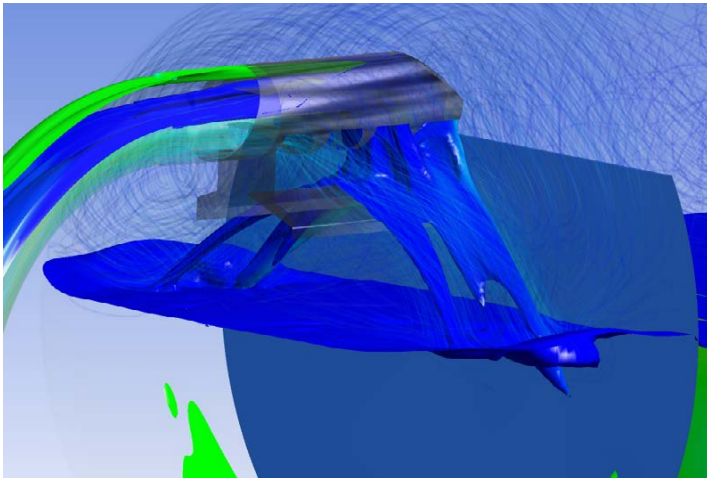
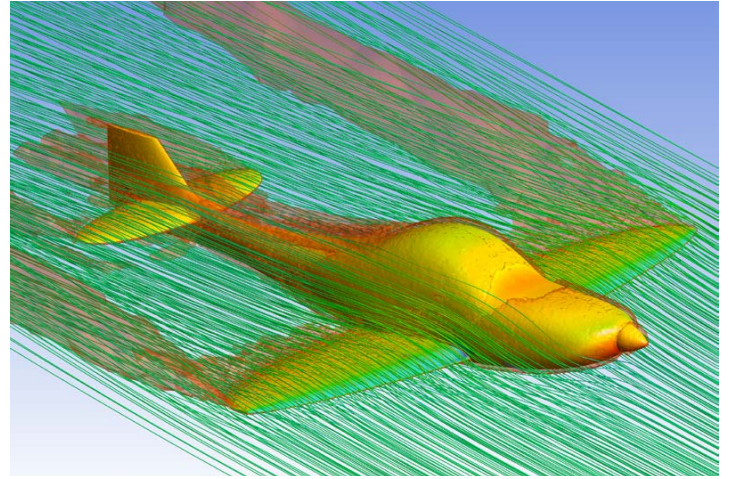
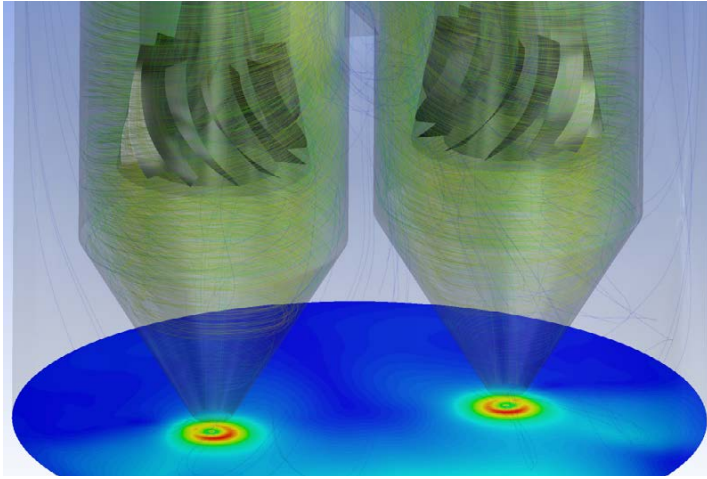
Swift TG Solutions has vast knowledge of fluid dynamics with real-world experience in a variety of sectors including Oil & Gas, Aerodynamics and Renewables.

Whether you need detailed analysis, are new to CFD or require CFD support, we are here to help. CFD allows you to:

- Evaluate, validate and optimise your system's performance
- Reduce product development time
- Reduce testing costs; and
- Test product performance prior to production

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.





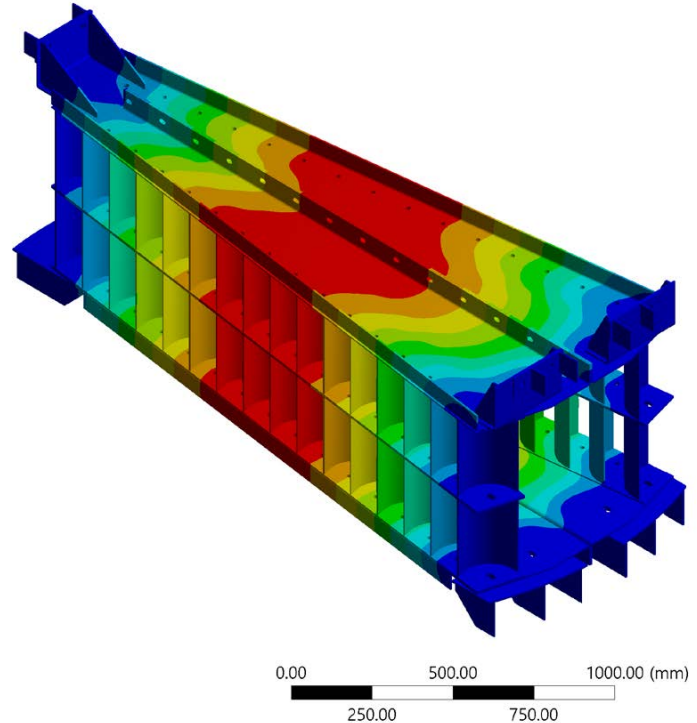
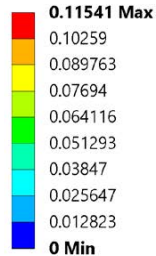
FINITE ELEMENT ANALYSIS (FEA)

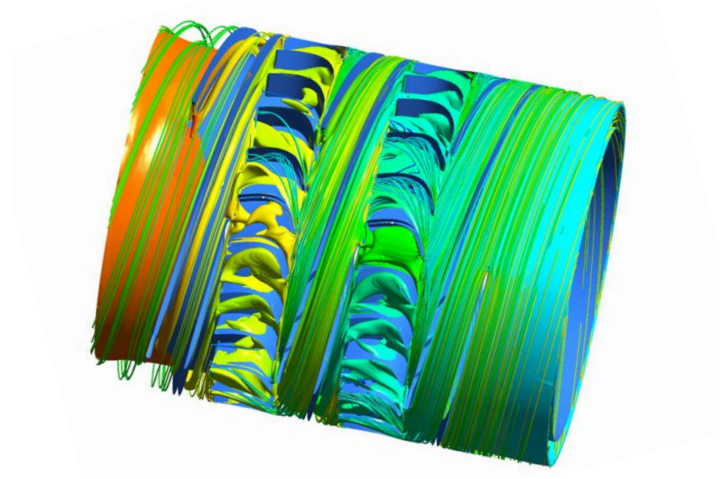
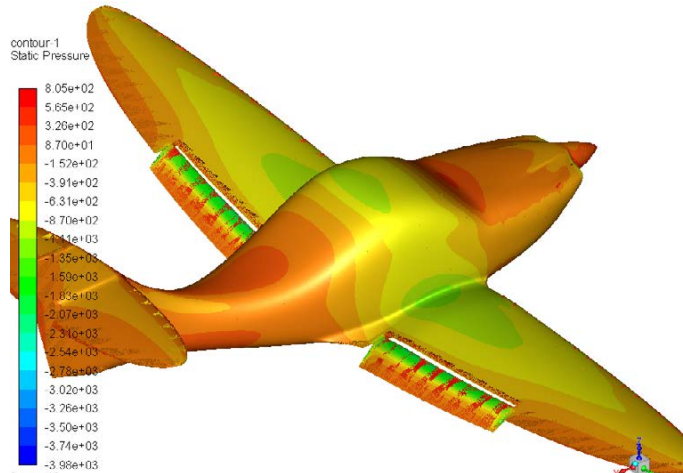
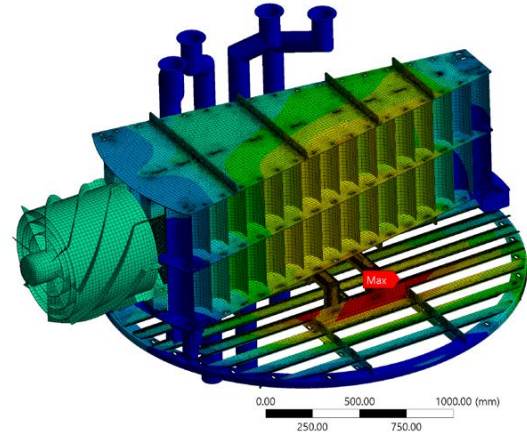
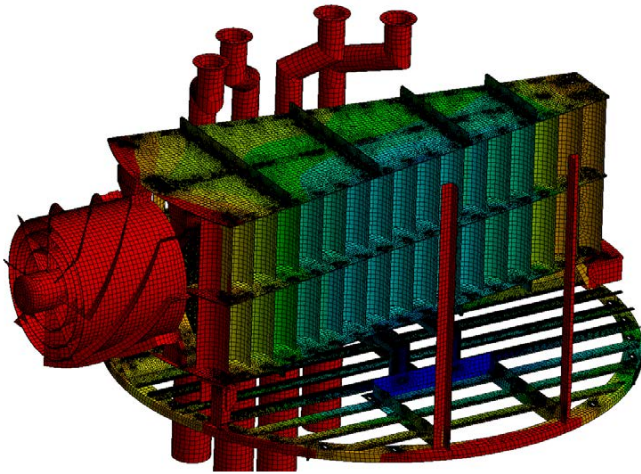
Finite element analysis (FEA) is used to ensure mechanical integrity by accurately analysing load paths and material stresses. As modern manufacturing methods enable final products to almost have no limitation on form then less rigorous forms of analysis become invalid. FEA can be used for new product or refinement of an existing product and is fast becoming an industry standard. A further advantage is that the input to FEA can be taken directly from CFD ensuring that situations not involving simple force or displacement inputs can reflect accurate pressure and thermal distributions.

Swift Solutions will help you to verify if a proposed design for will be able to perform to the required specifications prior to manufacturing, while helping to determine any required design modifications.

C: Static Structural

Total Deformation
Type: Total Deformation
Unit: mm
Time: 1
16/05/2019 09:38





OIL & GAS SOLUTIONS

Swift TG Solutions has extensive experience in the Oil & Gas industry with services that make oil and gas production more efficient. Through detailed analysis, design, testing, optimisation and know how, we deliver solutions that offer immediate return on investment.

We carry out full process system reviews, research and development, (CFD) simulations and hardware supply. Our main area of expertise is in the field of fluid separation encompassing both new and de-bottlenecking applications, topsides and subsea.

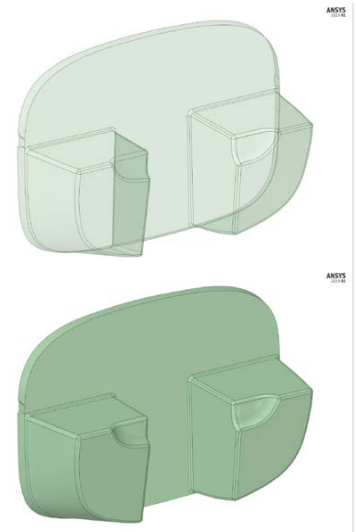
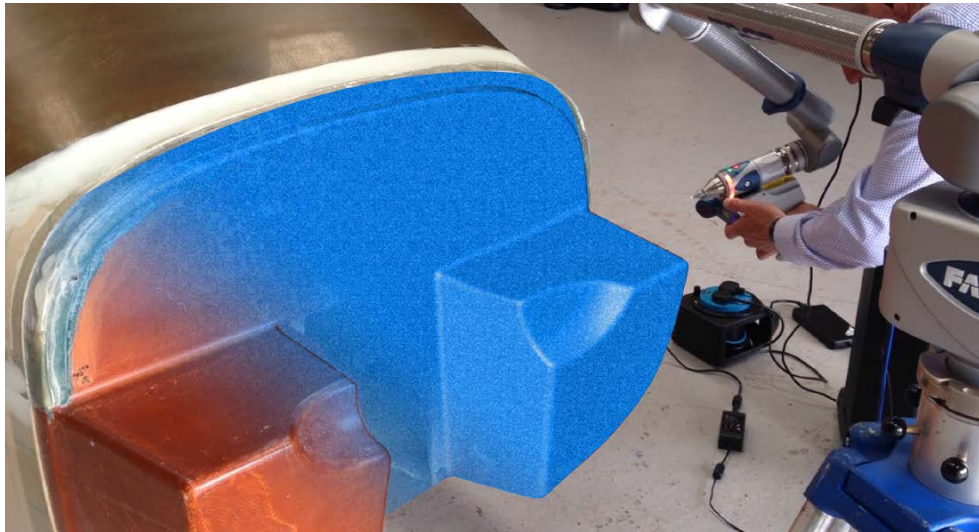
- Advanced Separator Internals Solutions
- Separator Validation Solutions
- Research and Development
- Computer Engineering
- Design Consultancy



REVERSE ENGINEERING

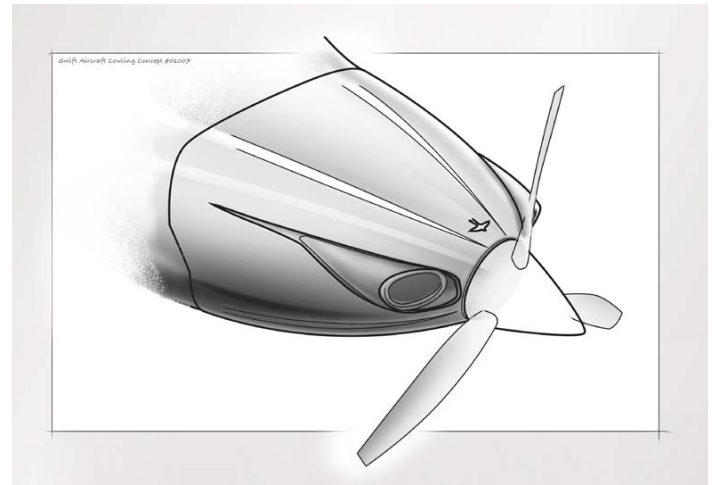
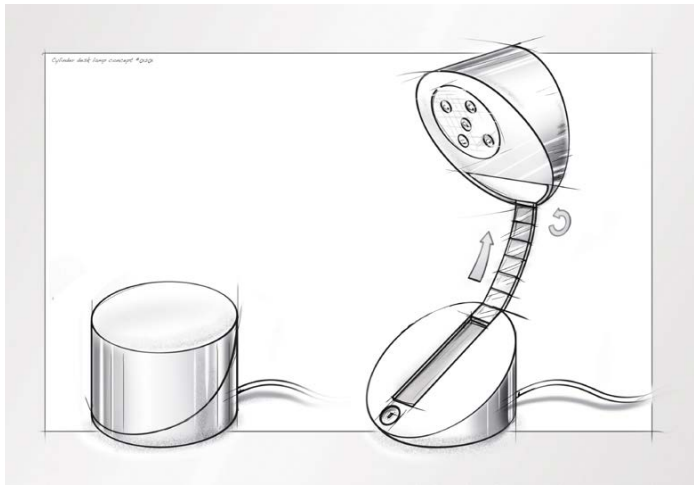
Many existing products have been crafted by eye without reference to engineering drawings. However, modifying these products to meet the standards and quality required by today's market may prove difficult without such information. In these circumstances 'Reverse Engineering' is a technique that can be employed to gather the required data.

Swift TG Solutions have the skills and tools, including laser scanning & photogrammetry, to provide the solution you need.



CONCEPT DRAWING

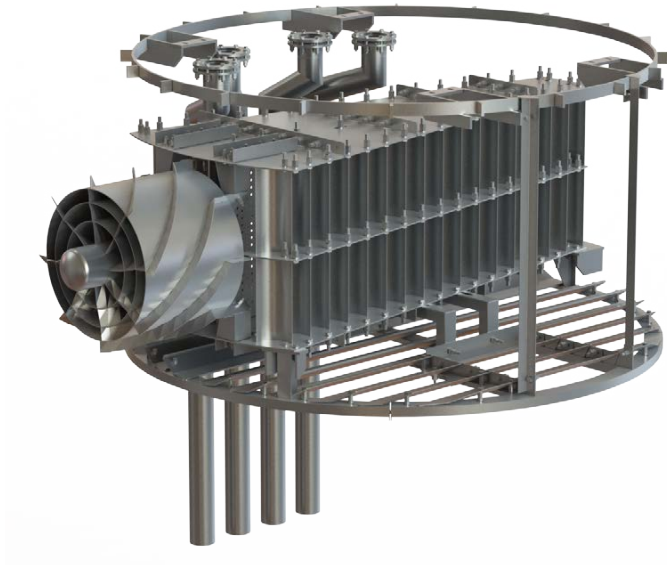
Most new ideas start as a sketch on a piece of paper, and however good they may be, taking these sketches to the next level requires design and engineering expertise. Swift TG Solutions has skilled designers who are able to create concept drawings to get the product life cycle in motion.



3D VISUALISATION

Swift TG Solutions can produce high quality 3D images to bring your design aspirations to life. The 3D designs we produce help companies showcase products, highlight features or guide their audience through set up and installation, whatever stage of the product cycle.

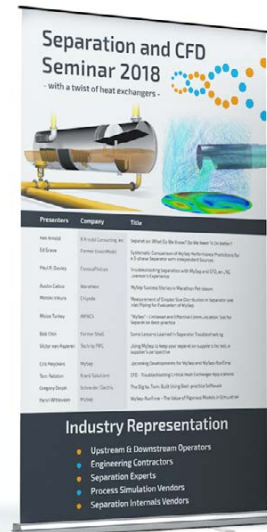
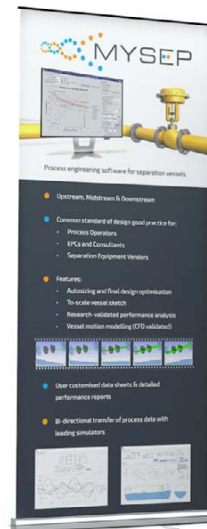
3D visualisation also allows you to create 3D printed prototypes, and can help with computer aided performance analysis including ergonomics, stress and flow analysis.



MARKETING & DESIGN

Via our sister company, TWF Solutions, offers everything you'd expect of a full service agency and much more.

TWF Solutions specialises in technology driven design and marketing services to provide real stand out solutions for our clients. Our marketing team can help you to make the most of your resources and enhance your areas of competitive advantage.

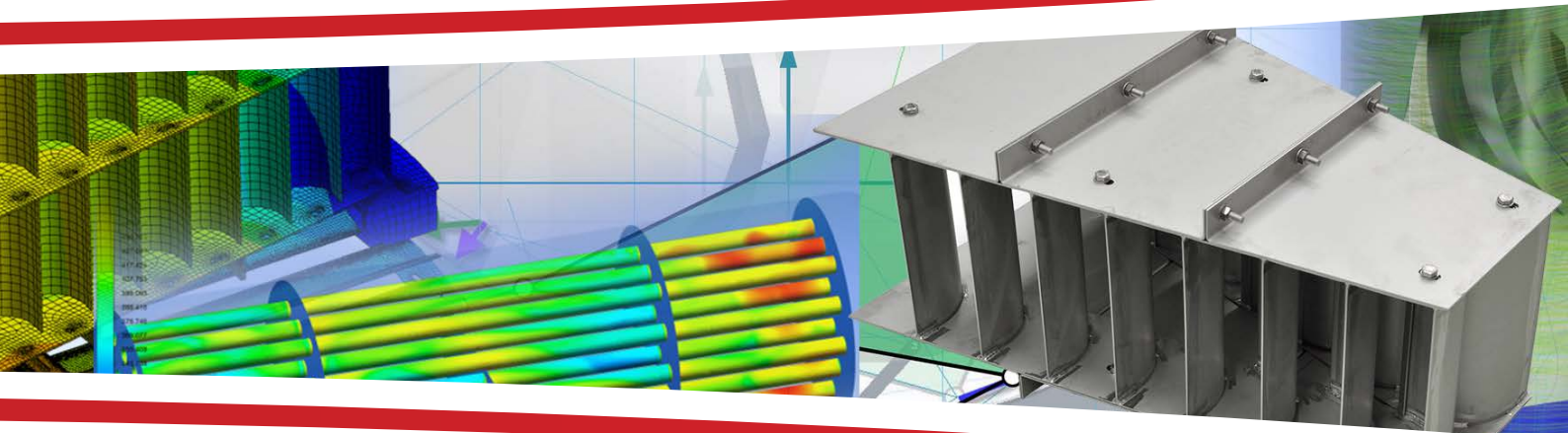




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