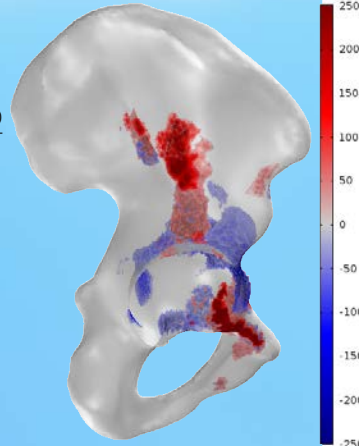


LASER HEAT TREATMENT & RESIDUAL STRESS OF METAL ALLOY STRUCTURE (TIME-DEPENDENT STUDY)

Having both chemistry and mechanical labs, equipped with laminar flow cupboards and tensile test equipment, we can physically test and characterize your designs and materials. Be it fatigue, creep, or long term corrosive studies that you need done, we can help.

BONE REMODELING (DENSITY GAIN & LOSS) IN PELVIS, DUE TO ACETABULAR IMPLANT



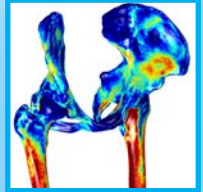
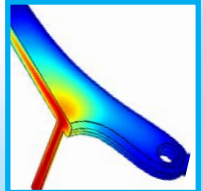
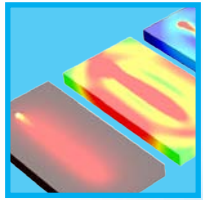
With the use of our extensive materials database, knowledge in characterising specialty materials, and in-house testing capabilities, we can help you find better material options, which outperform traditional solutions. This, combined with our exceptional modelling capabilities and ability to accurately predict multiphysics effects, we can help with your research and development needs. Contact us now to find out more.

**Continuum Blue Ltd.**

E : [info@continuum-blue.com](mailto:info@continuum-blue.com)

W : [www.continuum-blue.com](http://www.continuum-blue.com)

# Simulation, Testing & Analysis



Continuum Blue is a British based company, that helps customers develop, assess, quantify & optimise new innovative technologies & existing products, through advanced multiphysics simulation, testing and analysis services.

We assist in reducing product development cycles and cost, by eliminating redundant designs at an early stage. With over 15 years of experience in finite element analysis (FEA), computational fluid dynamics (CFD), and multi-body dynamics (MBD), Continuum Blue have helped many companies develop better products, through virtual prototyping and real world simulation.

We provide the following services:

- Material Selection & Optimization
- Multiphysics Simulations
- Material Testing
- Failure Analysis
- Design Optimization



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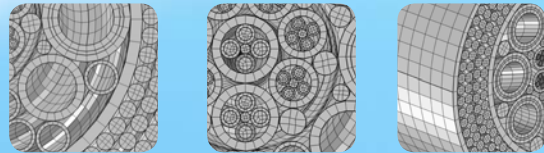
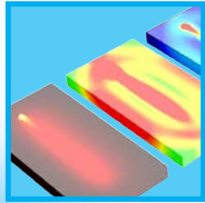




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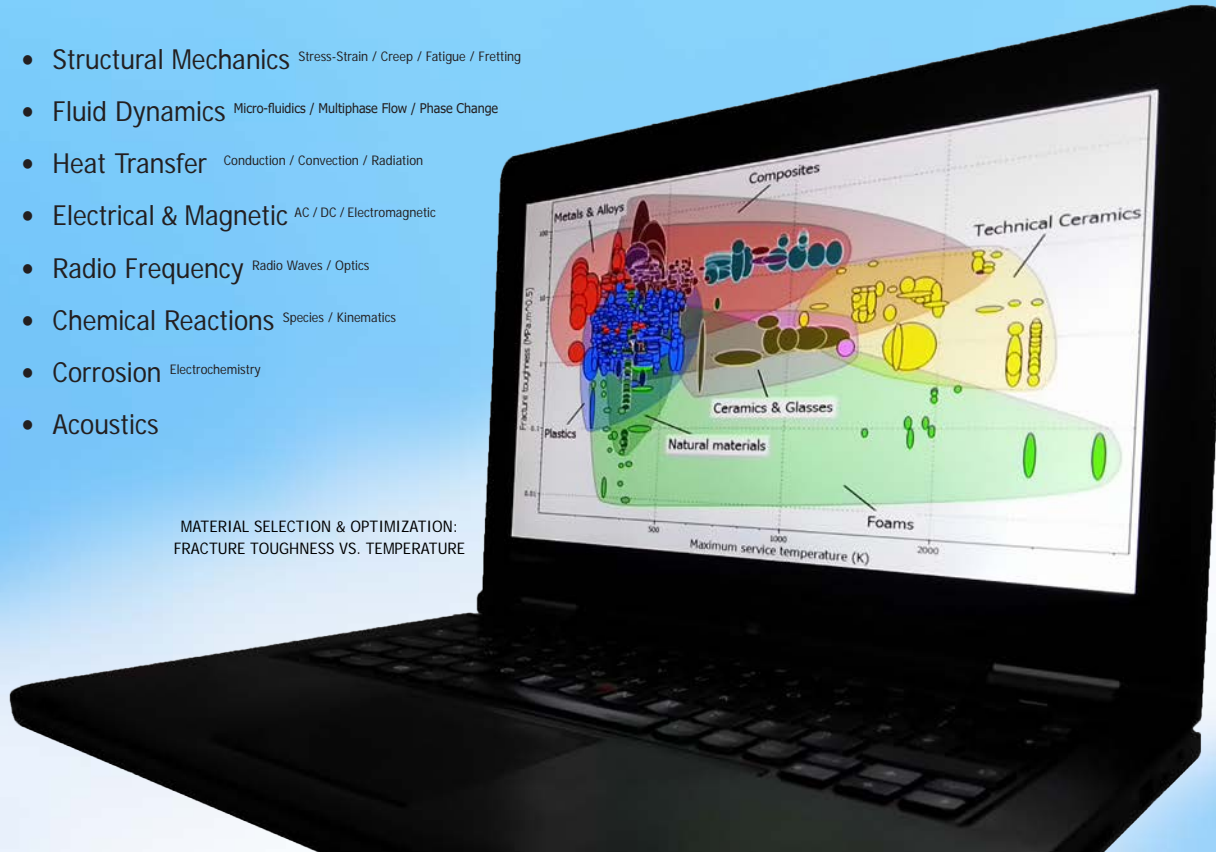
As COMSOL® Certified Consultants, Continuum Blue have the capability to develop & simulate your complex multiphysics problems. This will give you the ability to fully understand and quantify your design's performance, and compare it with your competitors. This can all be done before the costly process of prototyping, production and physical testing.

From complex multiphase fluid flow, conjugate heat transfer, electrical & electromagnetic problems, to highly nonlinear structural issues, we are able to help.

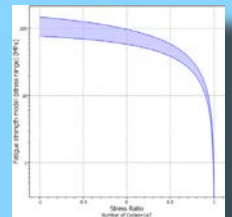
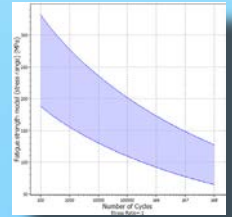
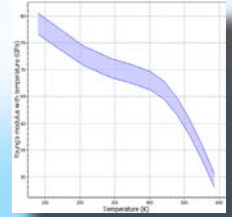
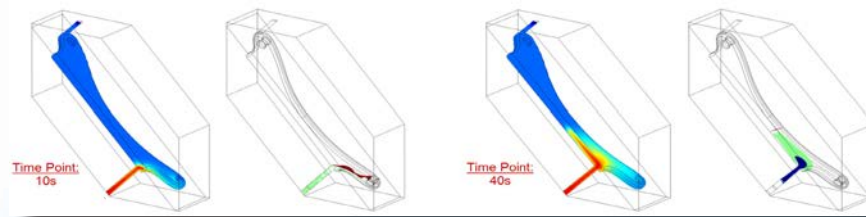


- Structural Mechanics Stress-Strain / Creep / Fatigue / Fretting
- Fluid Dynamics Micro-fluidics / Multiphase Flow / Phase Change
- Heat Transfer Conduction / Convection / Radiation
- Electrical & Magnetic AC / DC / Electromagnetic
- Radio Frequency Radio Waves / Optics
- Chemical Reactions Species / Kinematics
- Corrosion Electrochemistry
- Acoustics

MATERIAL SELECTION & OPTIMIZATION:  
FRACTURE TOUGHNESS VS. TEMPERATURE



MOLDING & MIXING OF POLYMERS: THERMAL RESPONSE & CURING VS. TIME



STRESS VS. TEMPERATURE, S-N CURVE & FATIGUE STRESS VS. STRESS RATIO OF COPPER ALLOY

Complementary to our analysis and simulation capabilities, Continuum Blue also perform material selection studies. This can help you assess alternative choices for your current design material. With the use of an extensive materials database, parameters such as, cost to weight ratio, strength, fracture toughness, maximum service temperature, and corrosive properties can all be compared graphically, thus, helping you to easily find alternative materials for your design.

**CONTINUUMBLUE**  
technology development

Continuum Blue Ltd.

E : info@continuum-blue.com

W : www.continuum-blue.com