



Virtual Testing

We can carry out structural simulations on parts and assemblies with finite element analysis (FEA) while we work to improve and validate performance and reduce the need for costly prototypes or design changes later on. Our *certified simulation* designers primarily use structural simulation to determine the strength and stiffness of a product by reporting component stress and deformations. Structural simulation covers a wide range of FEA problems—from the performance of a part under a constant load to the stress analysis of a moving assembly under dynamic loading, all of which can be determined using our virtual testing tools.



We can also prepare CAD models for FEA. This usually involves creating a configuration of the model that has been simplified removing unnecessary details and small faces which will speed up solve times.

Our models can also be used for CFD (Computational Fluid Dynamics) analysis to enable quick, efficient simulation of fluid flow and heat transfer. You can easily calculate fluid forces and understand the impact of a liquid or gas on product performance.



