VIRTUAL VALIDATION

SIMULATION OF ELECTRICAL COMPONENTS AND DEVICES

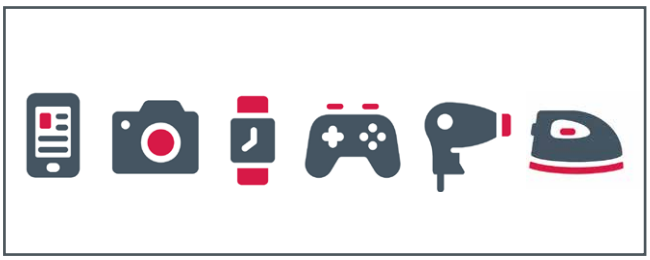
YOUR GLOBAL MOBILITY ENGINEERING EXPERTS

Customer satisfaction and enthusiasm for a product are generated not only from its appearance or the user experience, but also from the robustness and durability of the product itself. For example, customers expect that their smartphones or their cordless tool to work and as intact as possible after a fall to the ground.

By digitally verifying and validating products and product properties during the development project, fast design iterations are possible, development costs reduced, and last but not least better products are delivered.

EDAG uses advanced tools and processes embedded into the framework of computer-aided engineering (CAE) to provide high quality virtual verification and validation services during the development cycle. Our objective is to deliver feedback from the concept and initial stages of development, replacing the need of having physical testing at a later stage of the project, which is relatively more complex and expensive.

Our CAE experts support product development with the functional design of components, systems and complete vehicles.



EDAG Engineering GmbH
E-Mail: sales@edag.com

Using various numerical simulation methods (FEA, CFD, MBS) we simulate different test load cases (e.g. drop tests or compression tests) and product operation modes such as:

- Electrical components, e.g. circuit boards, parts and their housings
- Consumer electronics, e.g. smartphones, gaming controllers, cameras and laptops
- Appliances for personal hygiene, e.g. toothbrushes, razors
- Machines and tools, e.g. drills, saws
- Kitchen appliances, e.g. mixer
- Household appliances, e.g. irons

Overview of our services

Simulation and Optimization

- Creation of complex and accurate FE models from CAD data and including precise material properties and joining technology
- Mechanical analysis
  - Rigidity, strength and misuse loads
  - Operational strength and fatigue resistance
  - Vibration analysis
  - Analysis of shock loads
- Thermal analysis, flow simulations
- PCB-Analysis (PI / SI / EMV)
- Interpretations of the calculation results and optimization suggestions
- Creation of precise material cards in cooperation with our ATC test laboratory

Testing and Validation

In our test laboratories, accredited according to DIN EN ISO/IEC 17025, we test a wide range of components and devices based on your requirements.