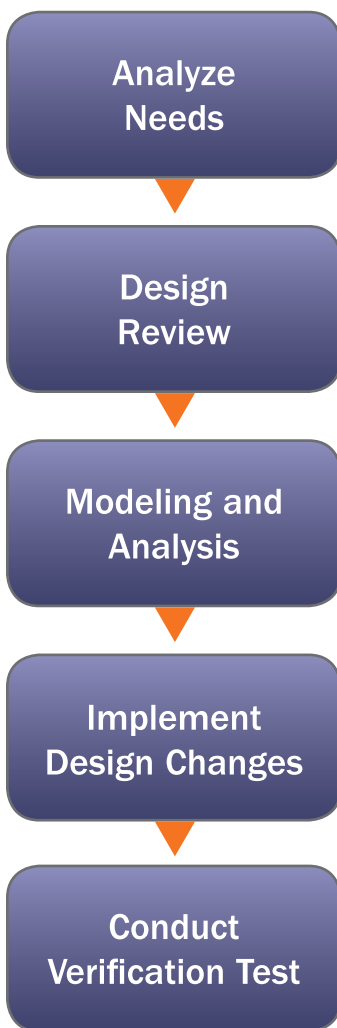


NTS Services Spotlight: FEA, Stress and Thermal Analysis

Specialists in Stress | Dynamic | Thermal | Mechanical



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Your Challenges

The path to market for your product is not always a smooth one. You are faced with numerous challenges along the way. Challenges such as:

- ▶ Shorter market windows compressing development cycles
- ▶ Shorter product life cycle increases warranty and service cost
- ▶ Lack of internal technical and equipment resources

The success of your organization depends on smart solutions to these or any challenges your business is facing. The market won't wait for your product when you have development delays or need to redesign to meet compliance requirements. NTS Engineering Services can help.

Smart Solutions

NTS engineers are ready to help you accelerate your time to market while reducing product development costs. Our integrated engineering services are provided by Subject Matter Experts with years of experience in their respective fields. Whether you need help on a single project with an accelerated deadline, or require an outsourced engineering team to work with you on a sustained basis, NTS can help.

Using Finite Element Analysis (FEA) techniques, our engineers will help you to dramatically reduce development time, rework and quality issues, while accelerating the design process through rapid optimization. By modeling through ANSYS, NASTRAN and other FEA tools, our experienced mechanical engineers and analysts will verify analysis findings against empirical test data, simplified models, and classical calculations to ensure accuracy. Our expert test engineers will verify findings in simulated settings in our laboratories to ensure product compliance.

Available Services Include:

Stress Analysis

- ▶ Static Analysis
- ▶ Linear/Non-linear Analysis
- ▶ Multi-part Analysis and Failure Analysis
- ▶ Component Life Prediction

Dynamic Analysis

- ▶ Modal Analysis
- ▶ Forced Response
- ▶ Random Vibration
- ▶ Shock and Rotor Dynamics

Thermal Analysis

- ▶ Steady State
- ▶ Transient
- ▶ Radiation and Convection
- ▶ Stress & Deflection

Mechanical Design

- ▶ Conceptual Design
- ▶ Product Design & Development
- ▶ 3D Solid Modeling and Assembly Modeling
- ▶ Detailing/Drafting

About NTS

NTS is a world leader in assisting organizations to access domestic and international markets. We are a single source for a full range of integrated engineering solutions, product testing, standards compliance, project management staffing solutions, engineering and managed services. Globally accredited by leading regulatory agencies, NTS can provide cost-effective programs to meet your requirements at one of our many U.S. or international facilities, or we can provide on-site solutions. NTS is the nation's largest independent standards compliance and product testing company serving companies within the aerospace, defense, automotive, telecommunications, electronics, power, medical device, computer, software and financial markets.