Tackling complex and technical subject matters and presenting them in a clear and conclusive manner is what we do best. We have unrivaled experience in evidence collection and documentation, failure analysis, materials testing, full-scale incident recreation and litigation support and our forensic engineering services cover accident investigations, fire origins and cause, intellectual property, product liability and personal injury.

The foundation of our forensic services rests on our full-scale laboratory and field testing capabilities. Quite simply, our extensive testing capabilities combined with our design and analysis experience are unsurpassed. We enable a wide cross-section of industries, along with the legal community, to reliably replicate environments and conditions to re-create situations of choice. Tests for motions, temperature, force, vibration, pressure, torque, aging, etc. can be performed under reliable, controllable conditions. With such high quality facilities, technical expertise and knowledge of industry equipment to hand, our forensic engineering practice serves as a valuable resource for today’s most pressing forensic engineering issues.

By operating as an independent engineering consulting company, not owned by or affiliated with any other corporations, insurance companies or legal entities, Stress Engineering Services is free to rapidly deliver the most objective and reliable results available to its customers. Our priority is to truly listen to our customers’ needs, effectively assess their individual problems and combine the right skills and resources to solve challenges in a timely manner.

Our forensic engineering team utilizes their many years of applied industry experience, and advanced degrees in a wide range of engineering disciplines, to assure clients that the service they receive will be second to none.
INTELLECTUAL PROPERTY
Our deep understanding of intellectual property and engineering underpins our expertise in patent and trade secret litigation. Backed by a thorough understanding of the issues involved, we are able to communicate issues clearly to counsel and prepare courtroom presentations that are both comprehensible and compelling.

PERSONAL INJURY
Our multi-disciplinary approach has proven to be a valuable tool in determining the true cause in personal-injury incidents. Our broad experience in these types of cases, combined with the fact that all necessary expertise can be found under one roof, makes us a reliable partner for personal-injury litigation support.

PRODUCT LIABILITY
With recognized expertise in design and manufacturing processes, our forensic engineering practice is often called on to provide support in liability issues involving a wide range of products. We back our expertise with comprehensive full-scale laboratory testing, detailed product analysis, engineering modeling, and a thorough examination of failed parts or the recreation of events preceding the accident.

STRUCTURES & FOUNDATIONS
We have been designing, analyzing and testing structures and foundations for more than four decades. Our experience includes fixed and floating structures, mobile cranes, derricks, jack-up rigs, onshore and offshore pipelines, plant equipment, marine risers, piping systems, buildings, wharf structures, conventional and post tensioned concrete slabs, and undersea templates.

THIRD PARTY FORENSIC INVESTIGATIONS
In our metallurgical laboratories, we conduct independent, efficient, cost-effective third-party forensic metallurgical investigations with specialized equipment and highly trained personnel. Our team includes many licensed professional engineers who often serve as expert witnesses for forensic investigations and we provide laboratory services to experts who may not have the number of technicians or the full range of lab capabilities that we offer.

MATERIALS SCIENCE
We are experts in corrosion and the corrosion fatigue process, as well as non-metallic failure mechanisms. Our expertise expands to a deep understanding of cryogenic and high temperature failures including brittle, creep and stress rupture fractures.

ELECTRICAL ACCIDENTS
By analyzing the causes of electrical accidents our forensic engineers can determine if they resulted from mishandling, weather, misuse, misapplication, inadequate maintenance, design or code violations. We also have extensive knowledge of electronic control systems, along with the ability to translate this technology into terms that are easily understood.

FIRES & EXPLOSIONS
Our knowledge of upper and lower explosive limits, auto-ignition gas temperatures, shock dynamics and equipment operating temperatures makes it possible for us to skillfully analyze these incidents. In addition to staffing two Certified Fire Investigators, we have extensive experience, and the resources to recreate and evaluate water heater fires and portable gasoline container explosions.

CHEMICAL PLANTS, REFINERIES & PIPELINES
We have a concentrated background in the chemical, petrochemical and hydrocarbon processing industries. We also perform research projects for industry groups such as the American Gas Association and the American Petroleum Institute. This depth of experience, combined with our multi-disciplinary approach, often provides our engineers with unique insight when analyzing problem areas.
ABOUT US

Since 1972, Stress Engineering Services has been servicing the needs of customers who require special, in-depth technical knowledge from engineering experts.

Stress Engineering Services is an established leader in providing proven forensic engineering services and solutions for a broad range of industries worldwide. Always at technology’s leading edge, we set the standard in technical and engineering excellence by providing clients with the right answers - on time.

This commitment to excellence is the cornerstone of our business – it stems from our belief that there’s more to providing quality service than just producing results. We possess the most advanced technology and equipment along with a team of leading forensic engineering experts with years of applied industry experience and a wide array of engineering disciplinary skills.