Structural Integrity Associates, Inc. (SI) is a leading engineering and consulting firm dedicated to the analysis, control, and prevention of structural and mechanical failures. The company was founded in 1983 in San Jose, CA, and has since opened offices throughout the United States and Canada, as well as established overseas affiliates.

Over the past 5 years, we’ve expanded our mechanical-based expertise to include nuclear fuel and advanced structures analysis capabilities. We also added chemical engineering to our cadre of nuclear plant offerings. Our ability to integrate a full scope of services, from inspection and condition assessment, to monitoring and remaining life analysis, repair or remediation, and ultimately, total risk management of critical equipment and structures continues to grow.

Our history is one of innovation marked by a creative multi-disciplined approach to component evaluation and repairs, as well as development of increasingly sophisticated tools reflecting a unique blend of technical expertise with the latest computer and expert system technologies.

Over the years, Structural Integrity has established itself as an innovative and responsive resource for answering virtually any challenge in the analysis, control, and prevention of failures in critical equipment and structures. Our experience ranges from R&D to engineering, metallurgy, fabrication, and NDE; from petrochemical to nuclear and fossil-fueled power plant support.

We welcome new challenges and urge you to contact us whenever the need arises 24/7/365.
OUR COMMITMENT TO CLIENT SATISFACTION

SOLUTIONS
ENGINEERED HERE
OUR COMMITMENT TO CLIENT SATISFACTION

Structural Integrity is committed to our clients’ satisfaction. With our Client Satisfaction program, we ask clients to rate us on eight critical criteria from quality to knowledge and more. We also talk with clients about their experience. Here are some responses:

- “(The crew) and the Metallurgical Lab really went out of their way to ensure we completed the recommended high energy piping inspections.”
  - Plant Operator

- “We have never seen so much expertise, ingenuity, and creativity in NDE solutions from a single company.”
  - Fossil Plant Executive

- “…the webinars and literature that Structural Integrity presents are the best in the industry. Not only the content…but the manner and quality in which they are presented, advertised, etc.”
  - Field Technician

“Structural Integrity always performs at a high level and I am continually pleased with their work. (The team) did an outstanding job, responded timely, worked diligently and efficiently, and delivered a good product.”

- Nuclear Utility
Operating and maintaining a nuclear power plant, renewing the license of an older nuclear plant, or licensing, designing, and constructing a new nuclear plant – all are monumental efforts that few utilities are resourced to tackle entirely on their own. Most utilities need the engineering services, inspections, monitoring systems, analytical software, and industry-specific training that can only come from an engineering consulting firm that has grown with the nuclear industry.

Structural Integrity has provided engineering services to both domestic and international nuclear plant operators since our inception in 1983. Since then, nearly every nuclear utility in the U.S. and many internationally have relied on our support. You generate the power, we’ll generate the solutions.

Engineered solutions devoted to nuclear fueled by science
We strive to be the most trusted independent provider of innovative, best in value, fully-integrated asset lifecycle management solutions.
SOLVING
CHALLENGES IN COMBINED CYCLE PLANTS
Structural Integrity is uniquely positioned to help power plant owners and operators meet the lifecycle challenges facing coal, gas fired, and combined cycle plants. We provide engineering and condition assessment services to the fossil power industry with more than thirty years’ experience tackling some of the biggest industry challenges such as seam welded piping, dissimilar metal welds, turbine bore cracking, and creep strength enhanced ferritic steels. Our success is rooted in an integrated, multidisciplinary approach that combines engineering analysis, advanced nondestructive examination, and materials evaluation combined with state-of-the-art digital solutions, to provide targeted and scalable asset lifecycle management solutions for fossil plant owners and operators.

Maintaining plant safety and reliability with proven asset lifecycle services
The integrity of pipeline infrastructure is a matter of serious concern for those within the oil and gas industry. Given the dynamic and complex regulatory environment, our clients seek to understand how to effectively address and manage their company’s integrity related challenges. With 35 years of specialized industry experience, we understand the pipeline industry and its complexity. We are committed to delivering high-quality and innovative solutions to help our clients maintain safe, reliable and efficient operations of their transmission, distribution and hazardous liquid pipelines.

Solutions to ensure the safe and reliable operation of pipeline infrastructure
QUALITY
MULTIDISCIPLINARY SOLUTIONS

TRUE INNOVATOR
OF NDE TECHNIQUES & TECHNOLOGIES
TECHNICALLY DEFENSIBLE ANALYSES

SATISFYING

REGULATORY REQUIREMENTS
CRITICAL STRUCTURES

From buildings to bridges — highways to hydro plants — critical infrastructure must be built to last. Whether you need design expertise on the front end of a construction project or accurate end-of-life assessment, or actionable knowledge of the consequences of an extreme event, Structural Integrity offers creative solutions to high-stakes infrastructure issues. With decades of experience and unmatched engineering expertise, we make integrity the foundation of every project.

With the depth of engineering expertise and the breadth of industries and facilities Structural Integrity services, the inclusion of Bend, Oregon-based TRU Compliance was an obvious fit to help facilitate a full scope of project-specific and product line approvals for a range of code requirements and disaster contingencies. TRU Compliance provides seismic, wind, and blast product compliance solutions especially well-suited for structures, systems, and components (SSCs) in the critical markets and industries served by Structural Integrity.

Efficient, innovative engineering solutions for complex problems
Structural Integrity helps our clients harness the power of nature. We effectively and efficiently meet the challenges of a rapidly growing renewable energy industry by developing and applying advanced technologies to determine equipment condition from a variety of renewable sources and keep equipment operating reliably. With decades of field experience and technical know-how, we are uniquely qualified to serve the growing hydro, wind and solar markets. We bring an array of talented experts, as well as models and tools, which can be employed to manage assets and address complex issues encountered in the renewable energy market.

We are uniquely equipped to address challenges in renewable energy industries.
CONSULTING SERVICES
FOCUSING
ON EQUIPMENT OPERATING RELIABLY

We are a highly responsive, client-centric firm providing consulting, inspection, monitoring services to the power generation, pipeline, process, and critical
LEVERAGING
THE LATEST IN TECHNOLOGY ENGINEERING PRACTICE
Innovation has been among Structural Integrity’s core values since its inception in 1983. From the introduction of FatiguePro™ in 1986 to our receipt of the 2015 NACE Materials Performance Corrosion Innovation of the Year Award, we have always strived to use technology, knowledge, and experience in new ways to provide valued solutions for our clients.

Our Strategic Development Group (SDG) was created to formalize our dedication to, and process for, coherent innovation. SDG includes a dedicated group of engineers and researchers with advanced degrees and over 50 years of combined experience in the development and application of technology. We have recently developed LATITUDE™, a revolutionary non-mechanized position and orientation encoding system designed for use with nondestructive examination (NDE) equipment, enabling an operation to collect high-quality encoded data using a manual examination procedure.

We stay on the cutting edge, directly assisting our clients in the development, evaluation, and application of unique solutions for unique problems. We can help leverage the latest in technology and engineering practices to minimize costs and solve tough problems.
When it comes to materials science, fieldwork can only go so far. Our Metallurgical Laboratory takes failure investigations and material condition assessment to the next level with state-of-the-art technology.

Our skilled staff begins every investigation with a solid understanding of why materials degrade and the underlying microstructural factors. With this insight, plant owners are better equipped to make sound decisions about critical plant equipment.

As a trusted leader in materials science, we offer accurate metallurgical assessments that uncover the condition of materials, the root cause of damage, and degradation and strategies to counteract it. We can also help with materials selection prior to installation.

Together, our laboratory and on-site material evaluation offer a balanced solution based on proven expertise in materials, engineering and non-destructive examination.
MATERIALS SCIENCE CENTER

TACKLING

TOUGH INDUSTRY PROBLEMS
RELATED TO MATERIAL PERFORMANCE