



Structural Integrity
Associates, Inc.

Expert Solutions

Expert Solutions



...for Dispute Resolution

Structural Integrity's Expert Solutions Group is founded on 25 years of engineering, consulting, and inspection experience in the Power Utility Industry. We pride ourselves on providing detailed, accurate, technically supported opinions and conclusions.



About Structural Integrity Associates

Structural Integrity Associates, Inc. is an industry leader in consulting and inspection services for power generation, energy, and energy transmission industries. By implementing a multi-faceted approach to problem solving, Structural Integrity's professional staff is well-equipped to tackle the toughest industry problems.

Whether an event is a major industrial accident or a single component failure, Structural Integrity's Expert Solutions group offers a comprehensive, professional evaluation of failure causation and analysis of contributing factors. The same methods used to analyze and resolve industrial challenges are applied to the investigations of accidents and failures within the power generation industry.

Structural Integrity's professional staff is experienced in tackling problems in alternative energy technologies and related industries. The engineering and materials evaluation services that Structural Integrity applies to traditional power generation problems are also applied to problems in the petroleum and chemical industries, construction of plants and equipment, industrial product failures, and newer power generation technologies such as wind, geothermal, and combined cycle.

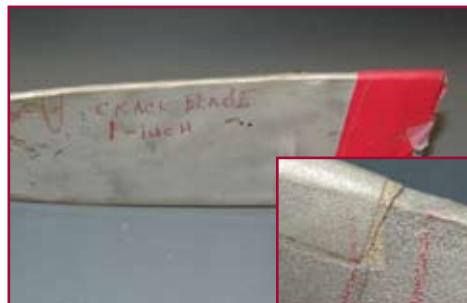
From materials failures, to manufacturing problems and defects, to industrial maintenance and construction issues, Structural Integrity provides the personnel necessary for a complete investigation of the incident. Structural Integrity's Expert Solutions personnel are experienced in litigation support and provide clear, accurate, and defensible conclusions based on thorough investigations and peer-reviewed science.

Expert Solutions

...for Dispute Resolution

Evidence Preservation

- Identification of Important Evidence Items
- Photo and Videographic Documentation
- Application of ASTM Standards
- Protection of Fracture Surfaces
- Preservation of Samples
- Collection of Pertinent Records
- Chain of Custody



Root Cause Analyses

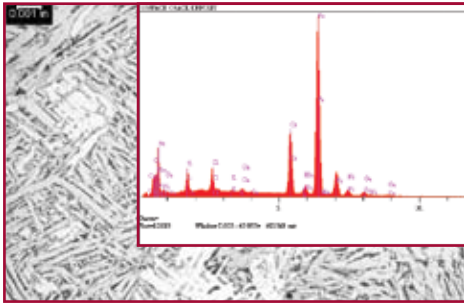
- Application of Kepner-Tregoe Methods
- Application of PII Methods
- Event & Causal Factor Charting
- Barrier Analyses
- Fault Tree Analyses
- Common Cause Analyses



General Failure Analyses

- Site Inspections
- Data Collection and Review
- Document/Drawing Review
- Evaluation of Procedures
- Evaluation of Maintenance History
- Analysis of Operational Variances
- Failure Analysis Project Oversight





Materials Evaluations

- Optical Metallography
- Scanning Electron Microscopy
- Quantitative Microstructural Analyses
- Fractography
- Scale and Deposit Analyses
- Chemical Analysis and Alloy Verification
- In-place Metallography and Replication
- Hardness Testing

Related Engineering Services

- Finite Element Analyses
- Code-based Stress Analyses
- Advanced Non-Destructive Testing
- Life Consumption Calculations
- Probabilistic Analyses
- Information Management
- Buried Piping Evaluation
- Vibration Analyses

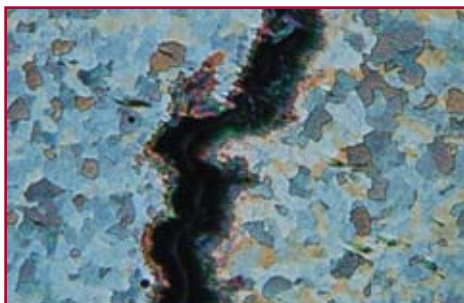


Expert Services

- Incident Investigation
- Review of Expert Reports
- Detailed Report Preparation
- Deposition and Trial Testimony
- Exhibit Preparation

Power Generation Industries

- Alternative Energy Technologies
- Fossil Fuel Utilities
- Combined Cycle Units
- Wind Turbine Generation
- Geothermal Generation
- Hydroelectric Generation



Related Industries

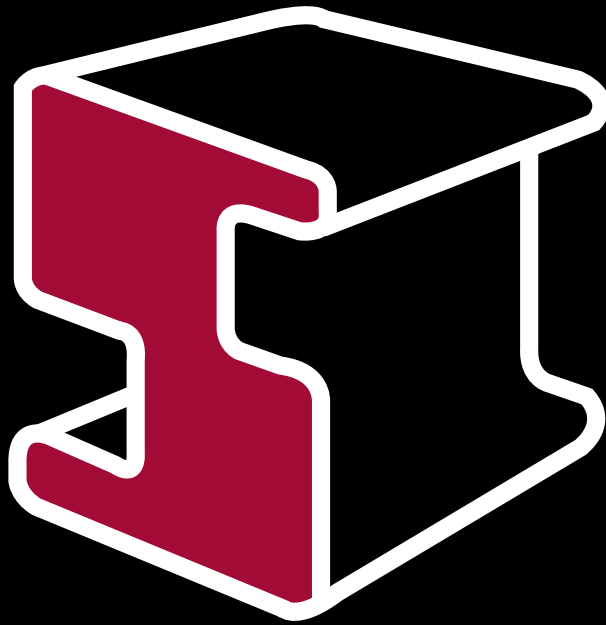
- Oil and Gas Production
- Chemical/Petroleum Refining
- Oil and Gas Transmission
- Construction

For more information on Structural Integrity's
Expert Solution Services, please contact:

Marshal D. Clark, Ph.D., P.E.

mclark@structint.com

801-676-0216



Structural Integrity Associates, Inc.

*Experts in the prevention and control
of structural and mechanical failures*

www.structint.com



Annapolis, MD
410-571-0861

Austin, TX
512-533-9191

Charlotte, NC
704-597-5554

Chattanooga, TN
423-553-1180

Denver, CO
303-792-0077

Los Angeles, CA
562-944-8210

Salt Lake City, UT
801-676-0216

San Jose, CA
408-978-8200

Stonington, CT
860-536-3982

Toronto, Canada
905-829-9817

Uniontown, OH
330-899-9753