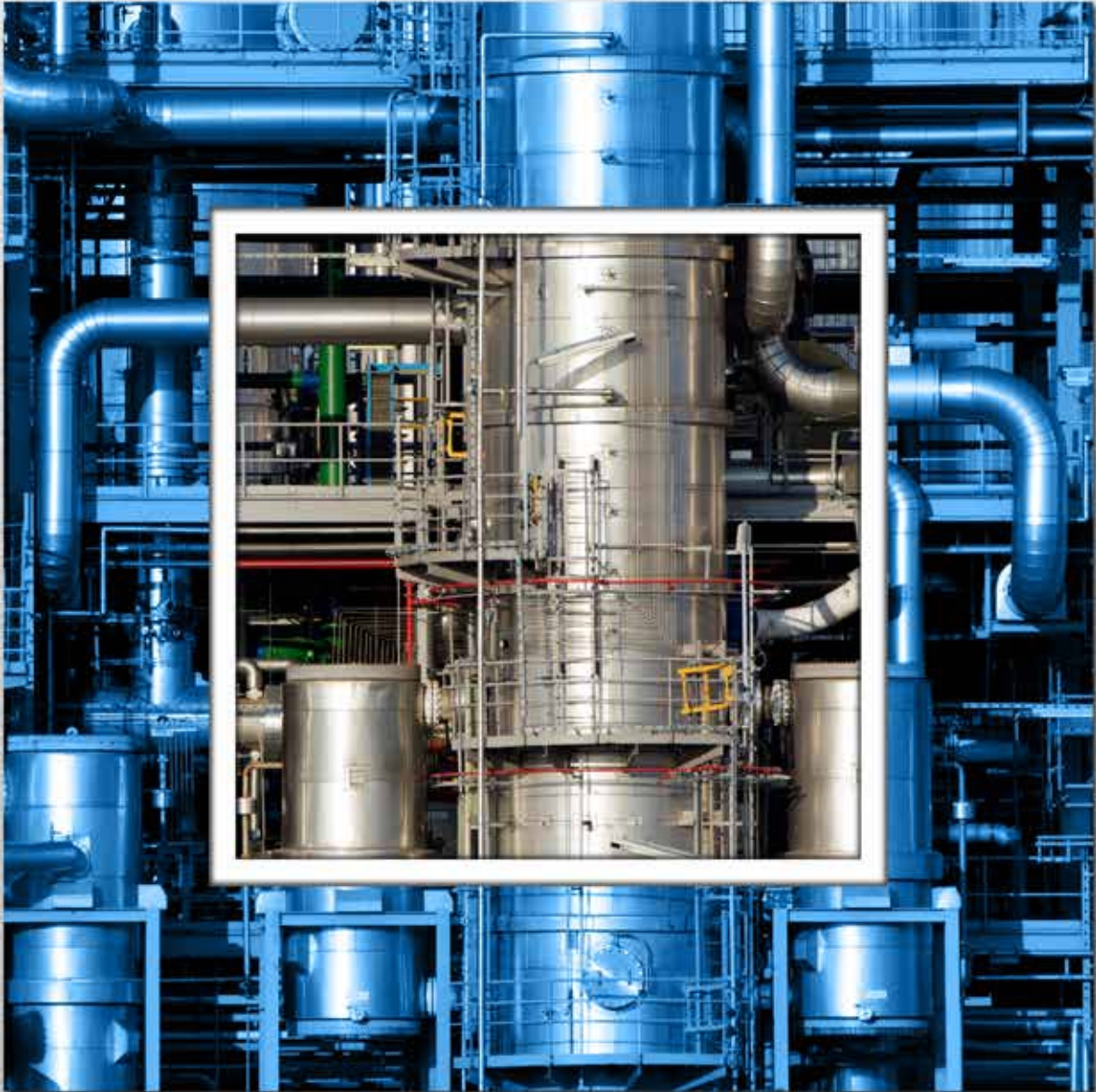
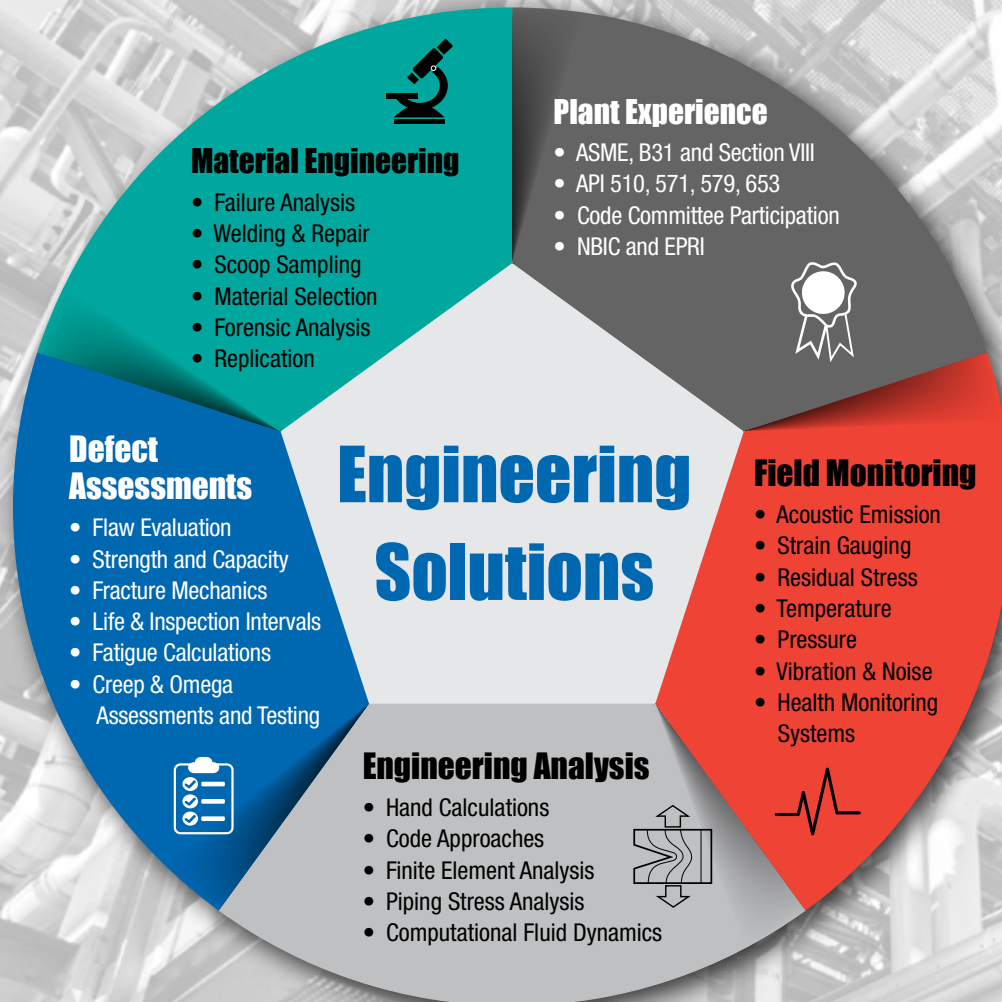


Downstream: Plant Services



Practical Engineering Solutions

Multi-Disciplinary Approach



We specialize in solving complex problems using a multi-disciplinary approach. We also understand the critical need to keep your plant online. With that understanding comes a responsibility to be experts in monitoring, analysis, assessment, and design of plant process equipment.

The Right Solutions

At our core, we combine the expertise of our people, cutting-edge technologies, state-of-the-art facilities, and advanced tools to collaboratively address your challenges with precision and efficiency. By leveraging classical engineering principles, modern technologies, and innovative applications, we tackle even the most complex technical issues our clients face. The strength of your business hinges on the integrity of your assets, and our dedicated team of specialists is here to guide and support you in managing downstream systems, processes, and equipment through our comprehensive portfolio of solutions.

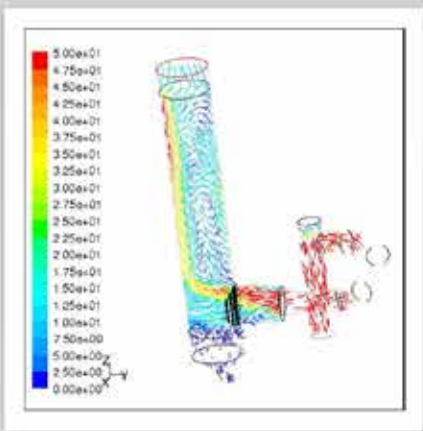
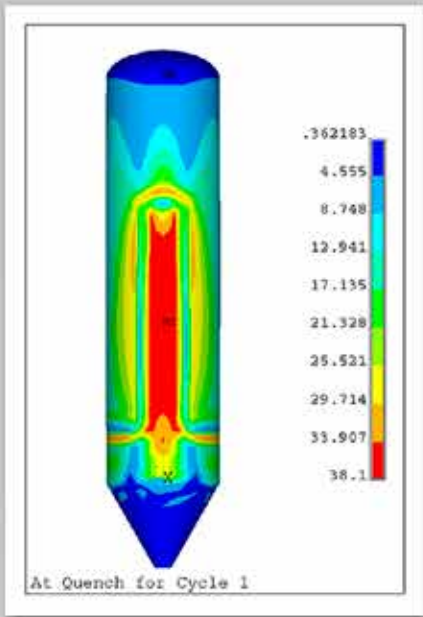
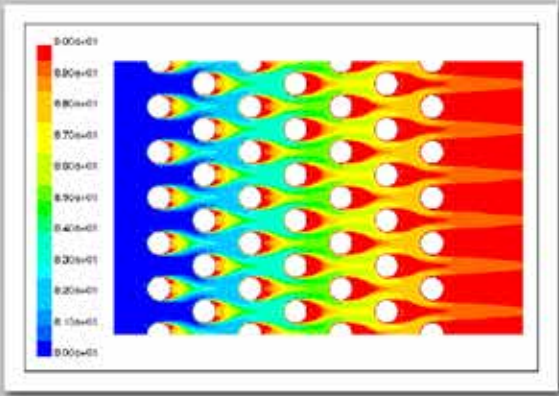
- Brittle Fracture Assessments
- Fire Damage Assessments
- Health Monitoring Systems
- High Temperature Hydrogen Attack (HTHA)
- Mechanical Integrity
- Process Engineering
- Turnaround Support
- Verification & Validation
- Vulnerability Assessments

We provide timely and cost-effective engineering solutions to improve plant and refinery on-stream efficiency, safety, and reliability. Our engineers and field technicians use their experience, knowledge, and a multi-disciplinary approach to solve the industry's toughest problems.

Primary Services

Our primary services form the foundation of our Downstream Plant Services group. We believe that excellence goes beyond delivering results; it involves utilizing the most advanced technology and equipment, supported by a team of highly qualified engineering experts. With years of industry experience and a diverse range of engineering skills, our commitment to quality service is unwavering.

- Acoustic Emission Testing
- API 579 Fitness-for-Service Assessments
- Corrosion Engineering
- Creep Assessment and Testing
- Field Instrumentation and Monitoring
- Integrity Operating Windows (IOWs)
- Process Hazards Assessments (PHA)
- Structural and Civil Engineering
- Vibration Monitoring and Analysis



With over fifty years in the problem-solving business, we are confident we can successfully tackle any challenge you face. Our team of experts has the know-how and determination to find solutions, driven by skill and a deep understanding of the industry.

Equipment-Specific Programs

We provide customized solutions for essential equipment and processes within your facility. Each program utilizes our extensive plant capabilities and services to accurately assess and monitor operational conditions. This approach ensures the development of optimal solutions tailored to your specific needs. The insights gained, along with expert recommendations from our experienced team, provides you with the data required to make informed decisions.

- [Coke Drums](#)
- [Fired Heaters](#)
- [Fluid Catalytic Cracking Units \(FCCU\)](#)
- [High Temperature Piping](#)
- [Pressure Vessels](#)
- [Steam Methane Reformers](#)
- [Storage Tanks](#)
- [Valves](#)

At the heart of our services lies a wealth of expertise and innovation. Our practical experience, obtained from years of work in refineries, power stations, chemical plants and pipelines, provides clients with a tremendous resource they can rely on daily or in emergencies.

Support Services

Whether you are a part of a small facility with limited on-site engineering resources or a large plant seeking additional expertise, our diverse team of subject matter experts is ready to assist. We offer a wide range of support services, from investigating failures to optimizing existing systems and reducing costs. Our support services go above and beyond the ordinary, ensuring you receive exceptional assistance tailored to your needs.

- [Computational Fluid Dynamics](#)
- [Failure Analysis](#)
- [Field Metallographic Replication](#)
- [Finite Element Analysis](#)
- [Laser Scanning](#)
- [Materials and Metallurgical Engineering](#)
- [Non-Destructive Scoop Sampling](#)
- [Testing](#)



We Combine Experienced Plant Subject Matter Experts with Applied Science and Engineering to Deliver Multidisciplinary “Practical” Solutions!

Our Plant Services Practice is focused on helping clients. We are an extension of our client’s engineering staff, working together with them on their design and analysis problems. Through our experience, commitment, and service, we’re confident we can take on any problem. We have the know-how and drive to find solutions through skill, determination, and the best engineering knowledge and methods.

We are known for helping with a broad range of problems to be our client’s **Complete Engineering Service Provider**. We assist on a wide variety of specialty services, including taking on your most difficult technical problems.

We look forward to helping you solve your engineering problems, no matter how daunting or complex they may be. At Stress Engineering Services you always get the right people, the right answers, and our commitment to service.

EXPERIENCE • COMMITMENT • SERVICE

About Stress Engineering Services

Stress Engineering Services is a leader in providing engineering services and solutions for a broad range of industries worldwide. Always at the forefront of technology, we are committed to delivering the most comprehensive design, analysis, and testing services with an unsurpassed level of engineering integrity and skill.

Since 1972, we have proudly served clients who require specialized, in-depth technical knowledge in areas such as materials engineering, metallurgy, testing, fitness-for-service, risk and feasibility assessments, pipeline engineering, mechanical design, fluid and fracture mechanics, process technology, product design and development, data acquisition, instrumentation, and more.



Our multi-disciplinary engineering methods, advanced technology, innovative applications, and highly knowledgeable and experienced staff continuously provide proven, quantifiable benefits to our worldwide portfolio of clients.



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