

FIRM PROFILE

GENERAL INFORMATION



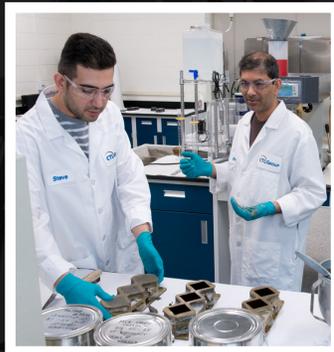
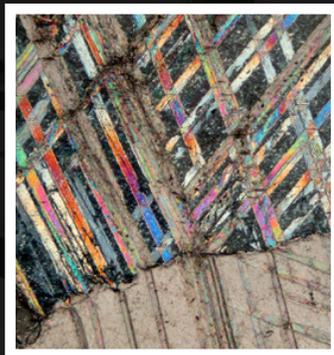
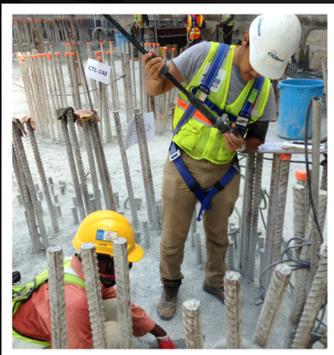
CTLGroup is an internationally recognized engineering, architecture, and materials science consulting firm, providing expert technical services to clients across an array of industries. Our technical breadth allows us to see problems through multiple lenses, while our technical depth permits us to find unique solutions to complex challenges. The expertise of our technical staff is complemented by one of the largest and most comprehensive private materials and structural testing laboratories in the world. The combined strength of our consulting and laboratory capabilities under one roof allows us to deliver integrated technical solutions to our clients.

CTLGroup's corporate history spans over 100 years, originating as a research and development laboratory specializing in concrete and cement-based materials and structures. Our service offerings have grown over the years to include structural engineering and evaluation, architecture and building science, materials science and engineering, mechanical engineering, forensic engineering, and emerging technology development. Throughout our history, CTLGroup experts have been involved in the development of advanced materials, contributed to the construction and preservation of global landmarks, investigated the cause of catastrophic failures, and helped with the recovery from impacts of natural disasters.

CTLGroup serves clients in an array of industry sectors, including:

- Buildings
- Industrial Infrastructure
- Power
- Materials + Products
- Civil Infrastructure
- Oil + Gas/Chemical
- Litigation + Insurance
- Transportation

No matter the industry sector, CTLGroup strives to provide our clients with high value, expert technical advice. We help our clients define problems, mitigate risk, understand "why", and make informed decisions.



Key Facts

- Over half of professional staff hold advanced degrees
- 70% of professional staff hold professional licenses within the U.S., Canada, Mexico, and U.S. Virgin Islands
- Licensed to provide engineering services in all 50 U.S. states
- 60,000 square feet of materials + structural testing laboratories
- Projects in over 70 countries

Quality Management System

Our dynamic QMS processes provide the framework for monitoring, measuring, and improving everything we do. Through our QMS, we have achieved accreditations and certifications, such as:

- ISO 9001 certification
- ISO 17025 and AASHTO accreditation
- U.S. Army Corps of Engineers validated lab status
- 10 CFR 50, Appendix B/NQA-1 compliant for nuclear safety related work

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SERVICES WE PROVIDE



Consulting Services

Building practices, construction materials, evolving technology, and structural issues present a variety of complex challenges. Clients around the world turn to CTLGroup for timely and reliable solutions. Our cross-disciplinary teams of engineers, architects, and scientists work together to deliver comprehensive results to almost any structural, material, or product-related problem. Few firms can match the powerful combination of our award-winning consulting teams and our renowned, world-class testing laboratories. Our consultants serve as trusted advisors and problem solvers in these areas:

- Building Sustainability
- Failure Investigation
- Structural Engineering + Evaluation
- Repair + Rehabilitation
- Pavement Design
- Mass Concrete Consulting
- Materials Consulting
- Nondestructive Testing
- Construction Consulting
- Metallurgical + Mechanical Consulting

Laboratory Services

CTLGroup provides the analyses and collaboration clients need when making big performance decisions. We offer physical, chemical, and microscopic analyses of building materials and products. With one of the biggest private structural labs in the U.S., CTLGroup conducts large-scale testing of engineered systems and components (load capacity up to ten million pounds). Clients count on CTLGroup for the testing of metals, aggregates, building systems, concrete, and cement. The diversity of our standard tests is complemented by the development of custom and specialized tests.

Testing areas and scope include:

- Materials Analysis
- Materials Characterization
- Materials Performance Assessment
- Research + Product Development
- Failure Analysis
- Mix Design Optimization
- Service Life Prediction and Modeling
- Specialized Testing

Testing services include:

- Analytical Chemical Testing
- Fatigue Testing (Stay Cable, AREMA, AAR)
- Mechanical Behavior Testing
- Mortar/Cement/Concrete Testing
- Nondestructive Testing
- Petrography/Microscopy
- Physical Testing
- Abrasion Resistance

