Emergent Solutions

CTLGroup offers a suite of expertise and services that span multiple markets and disciplines. The firm is uniquely capable of solving complex, challenging and unconventional technical problems. Our experts can address problems from materials and structural perspectives to deliver integrated solutions.

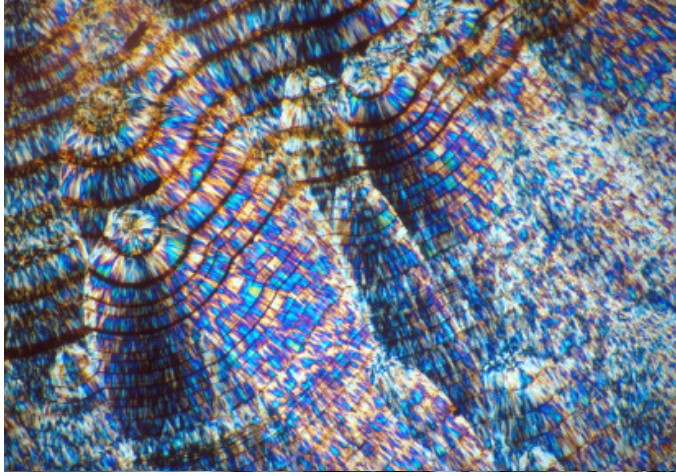
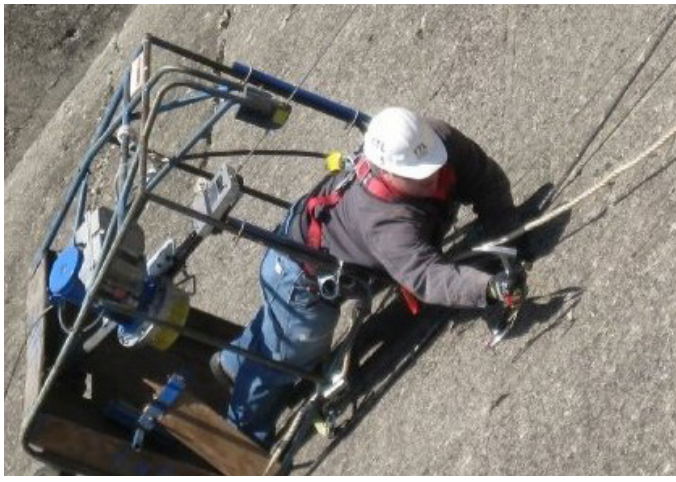
Our engineering expertise is complemented by one of the largest and most comprehensive private testing laboratories in the world. Few firms can offer such a diverse set of services, all under one roof.

Advanced Applications

The construction industry continues to embrace new technologies, and CTLGroup has been a pioneer in applying technology to the built environment. This experience has provided CTLGroup with the judgment and perspective of how and when technologies, such as structural health monitoring, can be used to benefit a client and not just generate volumes of information without real value.

Special Structures

Not all structures are created equal. Some are particularly complex, sensitive or intricate, or they may exist in a challenging environment. In these situations, conventional evaluation, design and analysis procedures simply do not apply. CTLGroup has extensive experience in the complex structure arena, including development, interpretation and application of associated codes, standards and engineering procedures.

Advanced Technology Capabilities

- Nondestructive Testing for Nuclear Facilities
- Building Instrumentation: Design and installation of custom noise and vibration monitoring system to examine the long-term effects of noise and vibrations on university research buildings
- Advanced Laboratory Services
- Petrography
- Scanning Electron Microscope (SEM)
- X-ray Diffraction (XRD) / X-ray Fluorescence (XRF)
- Thermogravimetric Analysis (TGA)
- Creep + Shrinkage lab
- Large-scale mechanical testing lab
- Loads in excess of 10 million pounds
- Closed-loop servo-hydraulic multiaxial cyclic testing expertise
- Software Development: Design and installation of custom structural health monitoring system for strain gage monittoring