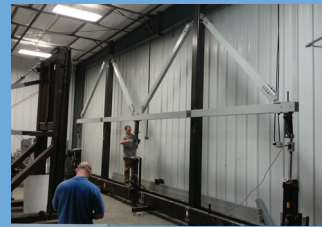
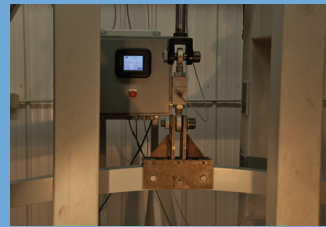
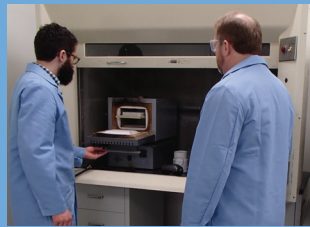


To support our rapidly growing customer application and new products development, we continue to expand our core competencies in composite materials design, processes, testing and analysis with our growing team of highly skilled composite materials engineers and scientists.

Our R&D and Engineering laboratories are equipped with state of the art instruments for mechanical, thermal and physical testing and analysis of our various pultruded composite structures. Our many PUPI® products for overhead electrical power transmission and distribution are a particular laboratory focus. We also partner with major outside testing and analysis firms for specialized tests such as high voltage and flame spread testing.

## ENGINEERING TESTING AND ANALYSIS FACILITIES:

- Development of advanced resin systems, reinforcements and coatings
- Mechanical performance of fiberglass structures, hardware and fixtures
- Materials analysis
- Product and component quality assurance testing
- Process monitors of crossarm beam properties, including full beam testing
- Process engineering improvements and verification
- Thermal analysis of materials
- Coating characterization
- Customer specific tests



## MATERIALS LAB

- SPI resin gel time
- Resin mix viscosity
- Lab scale resin batch production
- Differential Scanning Calorimetry (DSC) and Thermal Gravimetric Analysis (TGA) systems for resin and product analysis
- Water absorption • Flammability
- Hardness • Density • Porosity
- Construction analysis
- Sectioning and polishing equipment
- Optical inspection microscope with video camera for failure and defect analysis
- Metallurgical microscope with image analysis software and video camera

## CROSSARM & QUALITY TEST LAB

- Balanced load PUPI arm flexural strength and deflection tests
  - Deadend and Tangent
  - Longitudinal and Vertical
- Short beam shear strength
- Beam crush resistance
- Beam quality assurance tests
- Pole top extension bending tests
- Crossarm mount strength tests
- Customer viewed crossarm tests

## LARGE STRUCTURES TEST LAB

- Beam linear strength, compression and tension
- Unbalanced load tests
- Tests with varied mount and/or brace configurations
- Wood and steel pole attachment strength
- Alley arm tests
- Transmission structure tests to 32'
- Standard material properties: tensile strength and modulus, flex strength and modulus, shear strength and modulus

Visit us at [www.geotekinc.com](http://www.geotekinc.com)

## CUSTOMER BENEFITS:

- Predictable product performance • Improved mechanical properties • Optimum product curing conditions
- Reduced production time and minimal scrap • Lower material costs • Uniform product quality