

*Requisition:* SYM HR 19-001  
*Posting Date:* January 1, 2019  
*Location:* Raleigh

*Title:* **Test Engineer**

***Description:***

We are a small growing engineering company headquartered in Raleigh, North Carolina with a satellite office in Columbia, South Carolina seeking a hands-on mechanical or materials engineer to manage the day to day operations of a powertrain material testing laboratory. This lab has specialized servo-hydraulic and dynamometer equipment that is used to test gears and related powertrain systems primarily for aerospace, renewable energy and automotive clients.

***Responsibilities:***

- Design experiments and manage test plans that meet client goals
- Create and document test procedures
- Oversee the design and fabrication of custom test fixtures
- Manage the manufacture and procurement of test specimens such as gears, shafts and bearings
- Instrument test articles using strain gauges and other transducers
- Conduct experiments and train technicians on how to operate equipment and perform required measurements
- Perform basic failure analysis of tested specimens
- Supervise metallurgical and metrological inspection of test specimens
- Write test reports
- Calibrate and maintain equipment
- Ensure compliance to quality standards within the laboratory.

***Mandatory Qualifications:***

- US Citizen
- 4 Year Degree in Engineering or Related Field

***Must have a solid academic background in:***

- Engineering level mathematics, statistics and physics
- Scientific programming skills in a language such as Python

***Desired Special Skills:***

- Instrumentation such as force transducers, thermocouples, accelerometers and strain gauges
- Computerized data acquisition of dynamic signals
- Basic digital signal processing including FFT analysis

***Other:***

There is tremendous growth potential associated with this position. Excellent organizational and communication skills are required as there will be project management interface with technical communities inside some of the largest corporations in the world that produce aircraft engines, wind turbines, locomotives, automotive powertrains and other highly engineered systems.