



JOB NUMBER: BE-19-04

JOB TITLE: Engine Test Engineer – Project Engineer

Supervisor:

Status: Full Time – Exempt

Office Location: Nunica, MI

Baker Engineering, LLC (BE) is a leader in engine design and innovation for military and commercial applications. From concept through prototyping and testing, project engineers at BE are involved every step of the way. Projects include new diesel engine concepts, as well as engine support systems including advanced fuel delivery systems, turbo chargers, control systems, and more. BE is a division of Waséyabek Development Company, LLC that is wholly owned by the Nottawaseppi Huron Band of the Potawatomi, a Federally recognized Indian Tribe.

POSITION SUMMARY

The position is responsible for engine test lab operations which cover a wide range of duties from planning, hardware instrumentation, data acquisition, through testing and reporting. Diesel and spark ignited internal combustion engines are tested along with engine subsystems such as oil pumps, fuel delivery systems and generators. This individual works as a part of our team of engineers to produce and test new engine technologies for military and commercial applications. BE offers a hands-on work environment, where engineers utilize state-of-the-art design software and predictive analysis tools, and also spend time in the engine laboratory building and testing engine prototypes. The growing company has one facility in Nunica, MI.

ESSENTIAL FUNCTIONS

- Work with Engineering to develop engine test plan including: Instrumentation list, Engine support systems, Test lab controls, Safety
- Configure Labview software/National Instruments hardware for data acquisition and controls
- Interface with engine controller and CAN bus messaging
- Write code for system controls including stepper motor and ECU
- Maintain lab sensors/instruments and calibration data
- Maintain and configure lab-based support systems including heat exchangers, high- and low-pressure fuel supply, lubrication circuits, dynamometer hardware
- Configure test stands and prep engines for testing
- Conduct engine and hardware testing including motoring, combustion, durability, flow bench
- Maintain lab logs and test data
- Create Excel templates for test data analysis and presentation
- Provide clear and concise technical writing for test reports, proposals and presentations



- Other duties as may be assigned

MINIMUM QUALIFICATIONS

- Bachelor's degree Mechanical or Electrical Engineering with courses in Combustion Engines
- Proficient in Labview software
- Experience with CAN bus messaging
- Ability to write C Code
- Strong electrical knowledge pertaining to noise, signal, and frequency
- Hands-on/mechanically-oriented
- Minimum of 5 years' experience
- Good oral and written communication skills
- Ability to work onsite Nunica, MI
- Proficient in Microsoft office suites including; Word, Excel, PowerPoint and Adobe
- Proven ability to handle confidential information with discretion
- Demonstrated ability to achieve high performance goals and meet deadlines in a fast-paced environment
- Ability to pass a background investigation, including but not limited to nationwide criminal record search, and other relevant background information deemed necessary by BE.
- US Citizenship required (ITAR compliance)

PREFERRED QUALIFICATIONS

- Experience with software used in engine analysis such as FEA, Ansys CFX, Motec and GT-Power
- Experience with Creo CAD software
- Experience with diesel engine development
- Knowledge of diesel fuel injection systems
- Knowledge of turbocharger and superchargers

COMMUNICATION

- Effectively and regularly communicate with the BE President, and Engineering team
- Support BE's values, principles, vision, mission
- Support involvement may include producing reports, graphics, presentations, and other visual material

PHYSICAL REQUIREMENTS

Ability to focus on computer screens for extensive periods of time. The employee is occasionally required to stand and reach. The employee must occasionally lift and/or move up to 25 pounds.

WORK ENVIRONMENT

This position operates in a professional office environment as well as the engine test lab. This role



routinely uses standard office equipment such as computers, phones, photocopiers, and teleconference equipment.

TRAVEL

This position may require travel up to 5% of the time

POSITION TYPE

This is a full-time exempt position.

RELOCATION

Relocation expenses are not provided.

HIRING PREFERENCE

Veteran Hiring & Native American Preferences will be applied in accordance with BE policy.

Baker Engineering is committed to hiring and retaining a diverse workforce. We are proud to be an Equal Opportunity making decisions without regard to race, color, religion, creed, sex, sexual orientation, gender identity, marital status, national origin, age, veteran status, disability, or any other protected class.

Competitive salary and company-paid benefits are available to the right candidate. Visit www.bakerengineeringmfg.com for more information.

Email cover letter and resume to hr@waseyabek.com