

SENIOR FORENSIC MECHANICAL ENGINEER

About RFE:

RFE is a highly-respected, forensic engineering/architecture firm founded in 1965. We are located in Youngstown, Ohio, and work nationwide with a heavy concentration of work in Indiana, Kentucky, Michigan, New York, Ohio, Pennsylvania, and West Virginia. Our professional engineers and licensed architects specialize in damage investigations and failure analysis primarily for insurance companies and law firms. The firm's services include determining cause, separating damages, evaluating and analyzing extent of damage, developing repair scopes and estimates, and providing litigation support and testifying in court.

Job Description:

RFE is seeking a Mechanical Engineer (P.E.) with a minimum of 10 years of design or construction experience in mechanical equipment and systems to perform forensic mechanical engineering investigations. Our Senior Forensic Engineers are responsible for all phases of investigation, engineering analysis, and damage evaluation, including but not limited to:

- Maintain, manage, and coordinate individual workload
- Perform damage investigations and failure analysis
- Prepare quality written technical reports detailing conclusions and opinions
- Provide litigation support and court testimony
- Develop rapport with clients to expand business opportunities

This position is hands-on, must be willing to climb roofs, enter fire and/or collapse areas, etc. Applicant must possess excellent communication skills. Domestic travel is required (usually day-trips; however, longer trips may be required).

This position involves hands-on investigative work in the field, with follow-up analysis and report writing. Good writing and speaking skills are a must. In some situations, our work will lead to litigation, which may require expert testimony in court. Some marketing and administrative tasks also will be required. Marketing tasks may include visits to clients, group presentations, and training seminars.

Qualifications/Requirements:

- B.S. or M.S. in Mechanical Engineering with P.E. licensure - must have, or be eligible for, NCEES record
- Minimum 10 years experience in design or construction of mechanical equipment and systems
- Experience in forensic engineering or trouble-shooting and evaluating heavy equipment and manufacturing and assembly processes a plus, but not necessary
- Detail oriented and extremely organized
- Excellent written and oral communication skills
- Working knowledge of Microsoft Office software
- No current non-compete restrictions
- RFE provides a smoke free environment, non-smokers should apply

Assignments:

Our assignments, known in the insurance industry as “losses,” involve determining cause, separating unrelated damage, evaluating extent of damage, preparing repair/replacement estimates, and providing litigation support.

Types of damage mechanisms we investigate include blasting, collapse, collision, construction defects, design defects, earth movement, equipment defects, fires, floods, ice, lightning, material defects, mine subsidence, product defects, settlement, snow, and vibration.

Types of damaged property we inspect include cranes, booms, heavy vehicles and associated vehicle systems, consumer products, agricultural structures, apartment buildings, bridges, condos, hotels, houses, industrial buildings, machinery, manufacturing plants, office buildings, parking structures, public buildings, restaurants, retail/shopping centers, swimming pools, and warehouses.

Examples of Previous Mechanical Equipment Assignments:

An industrial steel holding furnace lost its load unexpectedly, resulting in a fire. Our investigation revealed that damaged refractory material was the cause. We were asked to separate the damage: what was the damage to the furnace; what was the damage from the resulting fire?

A piece of heavy equipment caught fire, reportedly due to operator error. Our investigation confirmed operator error because the machine was not maintained and cleaned on a scheduled basis, as required by the manufacturer.

A fire at an automobile bumper factory resulted in undue damage to expensive molds. Our investigation indicated that water used to put out the fire had contributed to the excessive damage due to the heat and the types of composite metals from which the molds were constructed.

A press operator lost several fingers while using a stamping machine. Our investigation showed that an old relay, which had not been replaced when the machine was overhauled, had permitted the press to double-cycle, causing the accident.

A grinding blade in a hand-held tool flew apart, badly injuring the operator. Our investigation revealed that the blade had been chucked improperly, and had been used in an air tool which ran the blade at twice the design speed.

A residential meat cutting machine's blade reportedly "flew" out of its box during unpacking and injured the insured. Our investigation confirmed the insured's claim.

A car on the interstate crossed the median and was struck by a truck going in the opposite direction, causing one fatality. Our investigation showed that not all of the truck's brakes were operational at the time of the accident.

An elderly couple died of carbon monoxide (CO) asphyxiation in an earthen dwelling. Our investigation revealed that the structure had been so tightly sealed that a back-draft condition had been created at the furnace flue, resulting in CO contamination throughout the dwelling.

A car hit a horse on the road at night. Our investigation provided a reconstruction of the accident, and showed that the driver had been traveling at a high rate of speed, thereby contributing to the accident.

Benefits:

RFE offers a competitive compensation/benefit package.

Contact:

For details about the firm, visit www.RFEweb.com. Send resume and cover letter by email to Melissa Bloomberg at mbloomberg@rfeweb.com.

Telephone inquiries about this position will not be accepted.