

**OPORTUNIDAD DE PASANTÍA EN IRLANDA DEL NORTE, REINO UNIDO, PARA ESTUDIANTES O RECIÉN GRADUADOS DE ING. MECÁNICA
(Ref. No. UK-2020-NI-04):**

Employer Information

Employer: Resonate Testing Limited <https://www.resonatetesting.com/>

Location of placement: Newry, N.Ireland, United Kingdom

Nearest airport: Belfast international or Belfast City Airport

Working hours per week: 37.5

Working hours per day: 7.5

Number of employees: 25

Business or products: The company typically supports Aerospace, space and high-tech industries providing a number of diverse internationally known customers with a broad range of vibration, fire and environmental testing which demonstrates compliance with international performance standards, supporting safety or reliability of their products. The family owned and run company is a new entrant into the market and is undergoing capability expansion and growth phase in response to customer driven requests and opportunities. The company is very proficient in the area of fire and safety assessment for civil aircraft.

Student Required

General Discipline: MECHANICAL ENGINEERING

Completed years of study: 4

Student status requirements: not required; ideal opportunity for a recent graduate

Language required: English Excellent

Other requirements: Minimum of 1 years' experience working ideally within an industrial or test laboratory

Any experience with programming and operating an Electro-mechanical vibration machine is a positive attribute to the candidate's application.

Demonstrated understanding of the principles of vibration and signal processing.

Demonstrated capability to ultimately achieve recognition as an expert within the industry.

NOTE: Strong possibility of permanent position for excellent performance

Expert level PC skills - data entry, some programming, MS Excel & WORD.

Experience of piezo electric and charge accelerometers including a clear understanding of their key strengths and limitations.

Demonstrated competence in test data analysis and record keeping.

Clear understanding of Sinusoidal, Random and Mixed mode vibration testing.

Excellent problem-solving skills and ability to work independently as well as part of a team.

NOTE: Early start date preferred

Work Offered

VIBRATION TEST ENGINEER:

The role holder shall be responsible for the preparation, control and oversight of all vibration testing undertaken at the company test site. The ideal candidate will have a proven record in the setup and operation of a vibration test facility for the testing of automotive and aviation components and have some knowledge or experience in at least one of the following attributes; instrumentation calibration, UKAS ISO17025 laboratory systems, NI Labview and /or Python programming or climatic/Environmental testing. The candidate should be proficient in MS Office, have good all-round communication skills, be able to lead by example and be confident working unsupervised as well as within a team.

ACCOUNTABILITIES

- The role holder shall be responsible for managing the design and installation of fixtures and rigs to mount test articles to the ED shaker.
- The role holder shall support Vibration testing, Environmental testing, Aircraft Fire test activities (including R&D) and special projects.
- The role holder shall be responsible for the selection, fitment and maintenance of all instrumentation required to support the requested test.
- The role holder shall be responsible for correctly interpreting the requested test environment and programming the vibration machine controller to perform the test. They will be responsible for confirming that the test requirements are accommodated by the capabilities of the shaker system and that they have been undertaken within the stated test parameters.
- The role holder will be responsible for the control of the test area including access, housekeeping, and control of fixture/tooling storage.
- The role holder shall ensure that the equipment employed is calibrated and correctly logged.
- The role holder shall be responsible for the maintenance of the vibration system including in-house weekly activities and those performed by the appointed 3rd party service provider (both scheduled and unscheduled).
- The role holder shall be responsible for the production test records including the storage/archiving of test results/Collating test data/producing test plots and providing technically sound and well-presented reports.

TASKS

- To support the review / update of work instructions and procedure relating to the vibration activity and to support the conduct of risk / COSHH assessments directly relating to vibration activity.
- To support, when required and trained, the acquisition of data for tests overseen by the instrumentation department as a whole.
- The programming of climatic chambers used directly in the conditioning of test articles subjected to the combination of vibration and thermal conditioning

Desirable:

- Postgraduate qualification in an engineering, science or related technical subject.
- Knowledge and experience of vibration analysis, measurement and modelling.
- Knowledge and experience of Data acquisition.
- Skilled in the use of computing programmes, such as MATLAB, Python and LabVIEW.

Number of weeks offered: 52

Working environment: Office work

Within the months: 02-MAR-2020 - 05-JUL-2021

Gross pay: 1666 GBP / Month

Deduction to be expected: 20%

Company closed within: 12-JUL-2020 - 17-JUL-2020

Payment method / time of first payment: Bank Transfer / At the end of the first month

Latest possible start date: 29-JUN-2020

Accommodation

Canteen at work: No

Expected type of accommodation: Room in a shared house Estimated cost of lodging: 300 GBP / Month

Accommodation will be arranged by: Trainee with the help of IAESTE UK

Estimated cost of living incl. lodging: 600 GBP / Month

Deadline for nomination: 13-JAN-2020