



R&D SYSTEMS ENGINEER



Location
Thattham, UK

Who are we?

Xtrac is the world's leading design and manufacture of specialist transmissions. Our customers include the top motorsports racing series including Formula One, Le Mans, IndyCar and NASCAR and we also supply transmissions for the most exclusive high-performance cars in the world. We are at the forefront of a once-in-a-generation opportunity as the automotive industry transitions from internal combustion to electric and hybrid and our experienced and dedicated teams are using the latest cutting-edge technology to achieve this transition.

What will you be doing?

We're looking for an experienced R&D Systems Engineer to join us as we continue to grow and deliver high profile projects to both our motorsport and high performance automotive customers.

You will be involved in many elements and phases of transmission projects such as interfacing customer equipment to Xtrac data loggers or test rigs, whilst working alongside Xtrac engineers and customers to validate and develop new designs.

Who are we looking for?



Minimum of a 2.1 bachelor's degree in an engineering related discipline, or equivalent experience and electromechanical design and control knowledge.



Good understanding of data logging concept and a structured approach to test specification creation.



Good organisation and time-management skills to manage workload and meet deadlines in a department where work priorities can change very quickly.



Knowledge of the integration of transmission systems into vehicles and the control strategies, communication, hardware, and software used to achieve this.



Basic electronics and electrical experience, such as microcontrollers, PLC, etc.



Excellent communication skills to ensure a good working relationship with technicians, in-house engineers, and customers.



Excellent IT skills including CAD and VBA and a logical and deterministic approach to problem solving.



Overall role objective

To undertake development and validation testing of new and updated designs of transmission and transmission ancillaries and assist in the development of the department, equipment, processes, safety, and team.

You will be supporting transmission manufacture by problem solving and assisting end-of-line, validation and development testing whilst providing engineering support to the Design Office and Advanced Engineering Group.

Responsibilities

- Assist with the day-to-day running of the R&D department, including equipment development and maintenance, test scheduling and manufacture support.
- Management of some or all elements and phases of transmission and transmission ancillary development projects, including rig testing, tooling design, test design and documentation, rig and vehicle integration, and vehicle testing.
- Design and produce prototype test tools, equipment and interfaces using electronic circuits and ICs, PLCs, code creation and simple fabrication.
- Produce full and accurate test specifications and reports through liaison with customers or in-house design engineers.
- Identify and specify sensor and data-logging requirements for testing and produce purchase requisitions as necessary.
- Support product delivery through Xtrac project management systems.
- Communicate test requirements to R&D Technicians and support testing.
- Run R&D test rigs when necessary, including end of line build quality assurance.
- Analyse test data using laboratory & motorsport data-logging software.
- Methodically undertake condition assessments of transmission and transmission ancillaries returned to Xtrac to support product development and customer use.
- Support customer race, test, or dyno events in the UK or abroad.
- Develop transmission control strategy working closely with the customer.
- Assist in the expansion of the department capacity, including hardware upgrades and new rig design from first principles.
- Support the implementation of key departmental processes.
- Ensure test equipment is maintained, calibrated, and serviced.
- Support and contribute to knowledge transfer activities.
- Undertake personal development and attend reviews as required.
- Always observe health and safety rules and maintain a safe working environment.
- Follow company quality procedures, standards, and work instructions.
- Carry out reasonable duties as requested by management.

Xtrac Values

Passionate

'Love what you do'

- Spreads enthusiasm & positivity
- Celebrates achievements and shares credit
- Supports others to be successful
- Actively listens
- Mutual respect
- Smiles and has fun

Accountable

'Always do the right thing'

- Treats everyone with respect
- Demonstrates ownership and personal accountability
- Empowers others
- Able to face into the truth
- Transparent
- Keeps commitments
- Leads by example
- Follows the process and rules

Collaborative

'Working together'

- Solution focussed
- Open minded
- Experiments with appropriate risk appetite
- Seeks diverse views and the input of others
- Encourages new ideas and thinking out of the box
- Shares views
- Creates a psychologically safe environment
- Follows process and procedures
- Empathetic

Externally Focussed

'Know your customer and deliver'

- Treats customer's fairly
- Values the customer and their business
- Keeps promises
- Proactively looks to improve the customer experience
- Has an internal and external customer-first mindset
- Keeps their word
- Works to the correct quality

Years to Learn

'Growth mindset'

- Embraces challenge
- Desire to learn
- Persists even when it is hard
- Sees failure as a learning opportunity
- Proactive with looking for development opportunities
- Willing to share knowledge and experience with others

Xtrac Benefits



Competitive Salary

We offer a competitive salary which is industry benchmarked on a regular basis.



Pension Contribution

All eligible employees are automatically enrolled into a generous pension scheme after three months of service.



Life Assurance

Xtrac offer all employees free life assurance from day one of your employment.



Private Health Care

You will be eligible to join the excellent BUPA Medical scheme after three months of service.



Eye Care Assistance

Employees are entitled to a free eye test and financial help with glasses if required to carry out their role.



Cycle to Work Scheme

We operate a cycle to work scheme allowing you to take advantage of tax savings on cycling equipment.



Company Events

Events are regularly hosted throughout the year including social, volunteering, and fundraising.



On-site Parking

All our facilities offer free on-site parking for employees with dedicated bike stores.



Reward & Recognition Incentives

The PACEY rewards are a recognition scheme aligned to our Xtrac behavioural framework where people are recognised on a quarterly basis.



Flexible Working for Some Roles

Xtrac recognises flexible working and it is available to various roles.



Salary Sacrifice Electric Car Scheme

Xtrac offer an electric vehicle salary sacrifice scheme enabling you to drive a brand-new, cost-effective electric car.



Free Safety Workwear

All PPE and uniform is provided to employees who are in a relevant role.