

**Reference:** NCT004  
**Job Title:** Senior / Principal Engineer / Consultant  
**Company:** ESR Technology  
**Location:** Warrington (near Manchester)  
**Employment Category:** Full Time (37.5 hours per week)  
**Salary/Benefits:** Competitive salary (dependent on experience), 25 days annual leave plus statutory holidays, additional leave purchase, up to 8% matched pension contribution, health care, life assurance, partial hybrid working and more.

- Do you have expert mechanical engineering knowledge and application experience relevant to bearings, gears or other tribological components?
- Interested in component failure analysis, forensic engineering, tribology and materials?
- Are you suited to client facing consultancy and problem solving?
- Do you want to work autonomously on a wide range of industrial projects?
- Do you want a varied and satisfying career?
- Do you expect to be recognised for your performance?

## **The Company**

ESR Technology is a leading Engineering and Science services company working within the rail, energy, process plant, utilities, and space industries. We are seeking highly motivated technical leader to join a small consultancy team, working on challenging projects for industrial clients. We need a confident, technically capable person who can take project responsibilities in their stride, help us grow our business and develop robust client relationships.

## **The Job**

A vacancy for an experienced Senior / Principal Engineer / Consultant has become available within our forensic engineering and tribology group (National Centre of Tribology (NCT)). We are looking for a specialist in mechanical engineering with significant component level application knowledge, a track record in mechanical failure/root cause analysis of mechanical systems, and a sound understanding of materials to work on a variety of industrial projects for clients based mainly in the UK although occasionally abroad. Our work involves finding robust solutions and providing reliable advice on problems of importance to our clients.

The job will require a detailed practical understanding of mechanical engineering, failure investigation and laboratory practices, working on forensic examination and component reliability/life extension projects.

Site visits, critical thinking, a forensic approach to problem solving and attention to detail are all necessary parts of the role.

Good communication skills are also essential. The candidate must be able to produce clear, concise written proposals, technical reports which meet client expectations and make formal presentations of project findings to technically informed clients. The candidate will also be business aware and able to work to controlled budgets and fixed time constraints.

The type of work requires someone with both theoretical and practical skills, willing on occasion to be hands-on and with client maintenance and engineering staff to investigate component assemblies as well as to lead dis-assembly/test and root cause investigations of components received in-house at our premises.

## Requirements

The successful candidate will need to be highly professional, client focused, self-motivated and able to prioritise work and confident to apply their technical knowledge and experience to investigations and circumstances alike.

Required background, skills and aptitudes:

### Strong technical skills

- Strong technical analysis and problem-solving skills (both theoretical and practical).
- A creative and original approach to finding solutions that will achieve client objectives.
- An understanding of how engineering components, especially but not exclusively tribological components, function, degrade and ultimately fail.
- An ability to synthesise complex information and data to focus on the core technical concerns.
- Knowledge of bearings, gears and other tribological component types, their correct use and failure modes.
- A sound tribological background and understanding of (especially ferrous) materials.
- A good understanding of root cause failure analysis and/or forensic engineering.

### Commercial awareness and project management skills

- Experienced in working with clients and colleagues at all levels.
- Able to identify, secure, undertake and manage technical consultancy work in mechanical and materials engineering.
- Business Development: able to contribute to winning new mechanical and materials engineering project business.

### Client focus

- Excellent written and verbal communication of technical results
- Conduct technical investigations, solve problems, and provide solutions for clients across a wide range of industries.
- Responsibility for managing own workload and planning staff resources.

### **Qualifications**

- Bachelor's / Master's degree and professional experience.
- Membership of a professional body would be desirable.

## Travel

Occasional UK and International travel.

## Experience

At least 6 years relevant experience in a relevant technical area is required.

## Right to Work

Prospective candidates for this role should be aware that any offer of employment in connection with this vacancy is conditional upon, and subject to the candidate obtaining, and at all times continuing to have, the right to live and work in the United Kingdom.

## Application

If you are passionate about delivering outstanding value to our clients and our business, then this could be the role for you. Write with full CV, highlighting what you can contribute in this diverse and interesting role to: [careers@esrtechnology.com](mailto:careers@esrtechnology.com)