

**Steven Tudor MEng (Hons) CEng MIMechE**  
**Consulting Forensic Engineer**

**Qualifications and Awards**

- 2014 Design for Six Sigma Green Belt**  
Smallpiece Enterprises
  
- 2008 Full member of the Institution of Mechanical Engineering**  
**Chartered Engineer status with the Engineering Council**
  
- 2008 Postgraduate Certificate in Management**  
University of Bath
  
- 2001 MEng (Hons) 1st class in Mechanical Engineering**  
The University of Birmingham

**Current Employment**

**2015 – Date Strange, Strange and Gardner, *Consultant Forensic Engineer***

Examples of matters reported on:

- Investigation into the root cause of mechanical failures in a variety of applications and products, including vehicles, lifting equipment, agricultural equipment, and consumer products.
  
- Noise Induced Hearing Loss (NIHL) - prepared over 250 reports on the analysis and estimate of daily noise exposure and noise immission levels (NIL) for a wide variety of industries and working environments. Reports in this field are predominantly on a single joint basis and, where possible, based on the use of noise level measuring equipment to conduct a noise survey.
  
- Hand Arm Vibration Syndrome (HAVS), Vibration White Finger (VWF) and Carpal Tunnel Syndrome – reports consider the hand-transmitted vibration exposure of those using vibrating tools and equipment and comparing such to relative guidance and Regulations. Where possible, the vibration level of tools and equipment is measured in applicable working conditions.
  
- Work Related Upper Limb Disorder (WRULD) – analysis of working conditions and repetitive motion in assembly work and production lines. Related conditions include Carpal Tunnel Syndrome and Tennis Elbow.
  
- Slips – analysis of slip potential of all floor types and lighting levels in line with current Slip Resistance Group guidelines for reporting on slips, trips, and falls.
  
- Falls/Working from Height – reporting on falls from vehicles, tail-lifts, structures, ladders, stepladders, roofs, scaffolds, and access equipment, as well as in children’s play areas.
  
- Personal Protective Equipment (PPE) – reporting on the applicability of PPE used in a variety of industrial environments, including gloves, goggles, helmets, etc.

Joined Strange Strange and Gardner as an engineer in 2015 and was promoted to Senior Engineer in 2019. To date, has prepared impartial reports as an expert witness on many aspects of employers’ liability claims, acting for Claimants, Defendants and as a single joint expert. Prepared reports on industrial accidents in factories, offices, and shops; accidents involving playgrounds and play equipment; product liability; and occupational health and safety matters and disputes concerning the operation of plant and machinery. Conducted more than 400 technical investigations in a wide variety

of industries and workplaces, based on subjects listed below. Provided verbal evidence at Inquests and Criminal Court Hearings and has assisted the Police with a number of investigations.

Strange Strange and Gardner are principally involved in safety matters where litigation is or may be involved, providing professional expert opinion by way of comprehensive reports and evidence in Court. The firm is consulted mainly by Insurance Companies, Solicitors and Loss Adjusters, mostly where an incident has caused death, personal injury, or disease.

Each investigation normally involves an inspection of the equipment and/or site concerned, followed by preparation of a comprehensive report supported by photographs, drawings, and calculations. However, desktop reports (where a site inspection is either not possible or considered unwarranted) are common. Any report considers the implications of relevant Statute and published authoritative literature, such as information from the Health & Safety Executive and applicable British and international standards.

Registered as an Expert Witness with The Law Society, The Association of Personal Injury Lawyers and The UK Register of Expert Witnesses.

## **Previous Employment**

### **2010 – 2015 Malvern Instruments Ltd., *Senior Mechanical Engineer***

- Working within the multidiscipline NPI teams designing components and assemblies for particle measuring instruments, including the design of high precision optics mountings and the handling of chemically volatile substances.
- Designing for a wide variety of manufacturing and fabrication methods, working closely with worldwide manufacturers to create high quality components using the latest processes in machining, fabrication, casting, and moulding.
- Developing products via ISO 9001 compliant processes and designing and testing products to be compliant with a wide variety of regulations, including CE and RoHS.
- Senior Fire Marshall.

### **2009 - 2010 QinetiQ plc., *Systems Engineer***

- V-model Systems Engineering and Architectural Design to ensure products and services meet with all customer and legislative requirements.

### **2003 – 2009 QinetiQ plc., *Mechanical Design Engineer***

- Providing mechanical engineering support on prototype development for the Defence industry in a variety of technical areas including optics, millimetre wave, microwave, and radar.
- Design and assembly of bespoke packaging and interfaces to conduct in-field testing on military vehicles, complying with all flight test equipment standards.
- Mechanical design of commercial products to transfer cutting edge military technology into consumer and civilian applications, including CE marking.
- Security Liaison Officer responsible for ensuring that MoD security procedures were adhered to.

### **2001 – 2003 QinetiQ plc., *Engineer***

- Acoustic and vibration characterisation of energy absorbing materials and marine vessel structures.
- Health and Safety Officer and principal technical contact for the deep-water acoustic test facility, comprising of a 6m deep test tank and 10t gantry crane.